

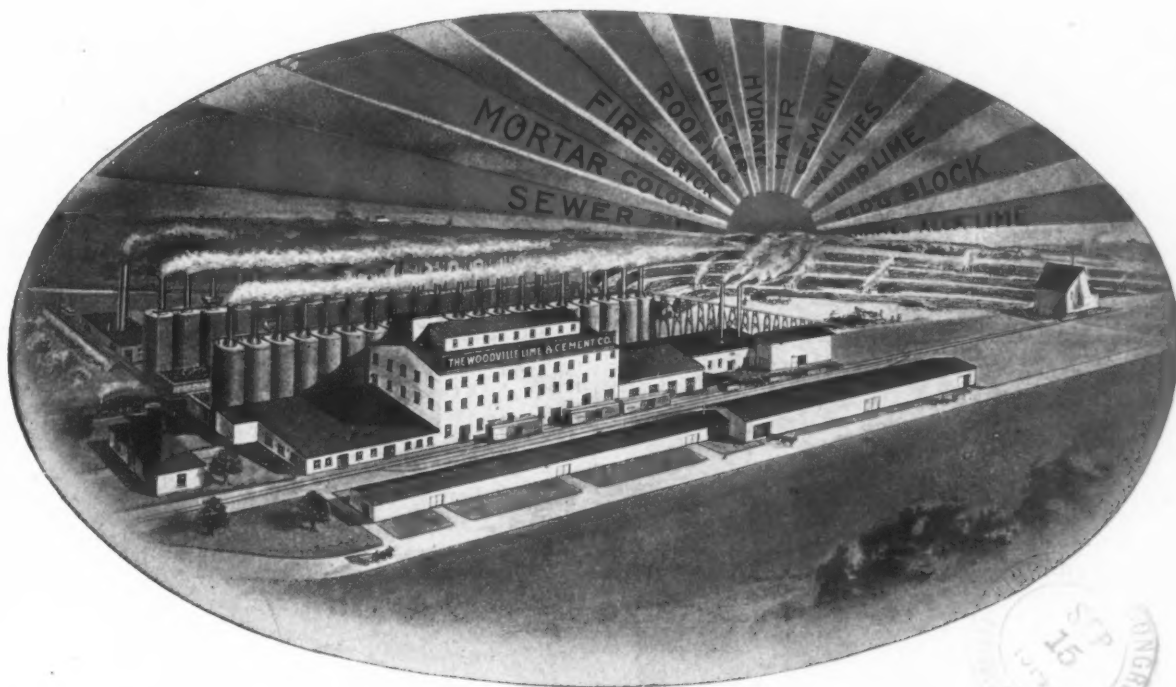
# Rock Products and BUILDING MATERIALS

INCORPORATING DEALERS BUILDING MATERIAL RECORD

Volume XIV.

CHICAGO, ILL., SEPTEMBER 7, 1914.

Number 9.



**"THE BEST UNDER THE SUN"**

MANUFACTURERS OF

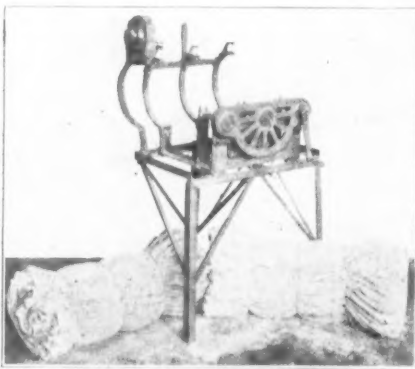
White Enamel Finish Hydrated Lime  
White Lily Finish Hydrated Lime  
Polar Bear "Alca" Stucco  
Enamel "Alca" Plaster  
Lump Lime

WHOLESALE OF

Hard Wall Plaster  
Keene's Cement  
Mortar Colors  
Sewer Pipe  
Roofings

**The Woodville Lime & Cement Company**

1341-50 Nicholas Bldg., Toledo, Ohio



## Bag Bundler

IT COUNTS 'EM AND  
BUNDLES 'EM

Saves Time  
Eliminates Errors

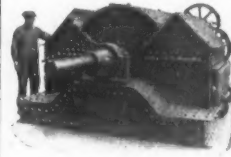
A few of our many customers say:

"It does the work of three men."  
"Will shortly order three more."  
"Would not take three times what we paid for it."  
"It is a wonderful money saver."

Write for prices

**The Faerberhill  
Manufacturing Co.**  
1392 East 40th St., CLEVELAND, O.

Agents wanted in every city. A side line for machinery and builders supply salesman.



## "PENNSYLVANIA"

**Hammer Crushers** For Crushing and Pulverizing Lime, Limestone, Gypsum, Marl, Shale, Etc.

Main Frame of Steel, "Ball and Socket" Self-aligning Bearings; forged Steel Shaft; Steel Wear Liners; Cage adjustable by hand wheel while Crusher is running.

No other hammer Crusher has such a big Safety Factor

**Pennsylvania Crusher Co.**

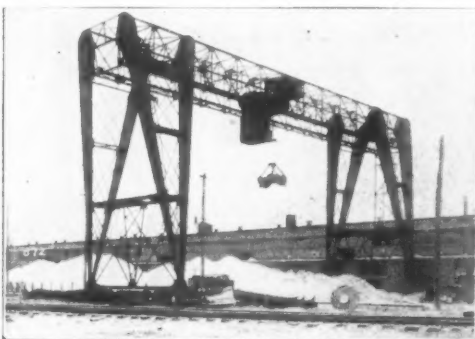
New York

PHILADELPHIA

Pittsburgh

**DEXTER** Portland Cement  
THE NEW STANDARD

Sole Agents **SAMUEL H. FRENCH & CO.** Philadelphia



Special Sand Handling Gantry Crane built for the Edward Ford Plate Glass Company, Toledo.

## SOLVING THE PROBLEM

of how to handle your raw materials in the quickest, cheapest and best manner is easily accomplished if you do it the

## "McMYLER INTERSTATE WAY"

Our engineers are ready to co-operate with you and show you how. It is a **real service** in which they take considerable pride, and it is yours for the asking.

**The McMyler Interstate Company** Dept. P-2 Cleveland, Ohio

Products—Locomotive Cranes—All type of Buckets for every purpose—Elevating and Conveying Machinery, etc.

New York

London

Chicago

## THE WHITACRE FIREPROOFING CO.

Manufacturers and Erectors of

## Hollow Tile Fireproofing

The Largest Independent Manufacturers of Hollow Tile Fireproofing in the United States.

All our Ohio Product is Manufactured from Pure Ohio Fire Clay.

All Size Partitions, Jumbo and Hollow Brick.

Our heavy Dove Tail Hollow Blocks are designed especially for fireproof residences with stucco finish. They are suitable for any part of the building and are adapted to the various architectural designs.

**Without Our Estimate You Have  
No Competition**

General Office: Waynesburg, Ohio

Chicago Office: Sales Department, 538 So. Dearborn St., Chicago, Ill.  
Factories: Waynesburg, Ohio; Malvern, Ohio; Chicago Heights, Ills.



A Dependable Product

Sold Thru Dealers

**Wheeling Wall Plaster Co.**

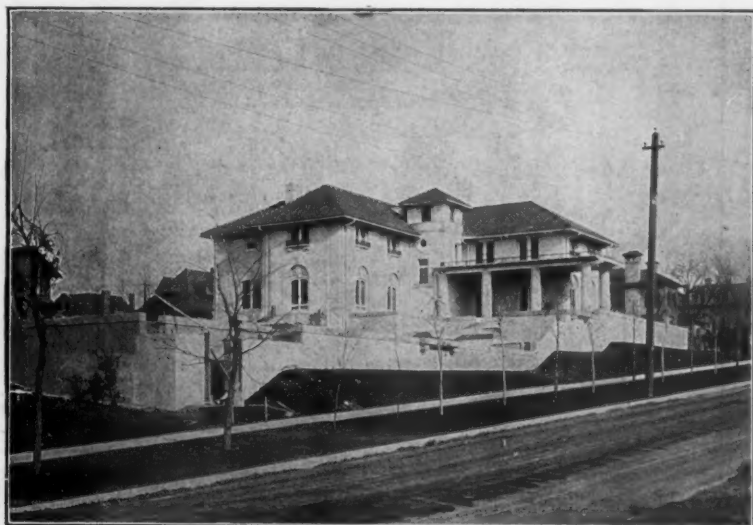
WHEELING, W. VA.

Tell 'em you saw it in ROCK PRODUCTS AND BUILDING MATERIALS









## MEDUSA WHITE PORTLAND CEMENT

Used on Walls and Residence of  
Guilford S. Wood, Denver, Colo.  
Biscoe & Hewitt, Architects

Medusa White Portland is unexcelled for building ornamentation, stucco, concrete building blocks, interior decoration, statuary, cemetery work, parks and grounds, tile, mosaic, setting marble, limestone or brick, etc.

### MEDUSA IS THE FIRST TRUE WHITE PORTLAND CEMENT EVER MANUFACTURED

*Medusa White Portland Cement can be used for exterior as well as interior work, is perfectly white in color and stainless. Guaranteed to be a high testing Portland, passing standard specifications. Medusa has been used by the U. S. Government in over 50 buildings in the past few years, and also in work on the Panama Canal, and shipments have been made to all parts of the globe.*

Write for free illustrated and descriptive booklets and samples of

Medusa Waterproofing

Medusa White Portland Cement

Medusa Waterproofed White Portland Cement

**SANDUSKY PORTLAND CEMENT CO., Sandusky, Ohio, U. S. A.**



## Mr. Dealer!

The following are the regular sizes we usually carry in stock:—

4x5x12 inch Backup Block			
5x8x12 inch " "			
3x12x12 inch Partition Tile		8x12x12 inch Partition Tile	
4x12x12 " " "		10x12x12 " " "	
6x12x12 " " "		12x12x12 " " "	

In addition to the above regular sizes we also make some specials. It will pay you to handle our "Minerva" Backup and Partition Tile —our shipments will please you.

**The Metropolitan Paving Brick Co.**  
Canton, Ohio

Tell 'em you saw it in ROCK PRODUCTS AND BUILDING MATERIALS

For the biggest kind of building work, or the smallest

## Marquette Portland Cement

has proved itself sound, reliable and 100% efficient—over and over again. A dealer who carries Marquette is going to build up the right kind of a trade. He will like to do business with us; we believe that the Science of business is the Science of Service.

The green guarantee tag on every bag of Marquette Portland Cement means we have made it better than government specifications; as much better as possible.

*Look for the Green Tag.*

We have an interesting book on "Concrete Roads and Pavements;" it's free; send for it.

**Marquette Cement Mfg. Co.**  
1335 Marquette Building  
Chicago

## NORTH-WESTERN PORTLAND CEMENT



The Reliable Portland Cement

A Portland Cement for the  
NORTHWEST

**North-Western States Portland Cement Co.**  
MASON CITY, IOWA

## Best Bros. Keene's Cement

*The Plaster That Stands  
Hard Knocks*



The permanent plaster for interior walls.

May be rettempered as often as necessary.

Makes a perfect bond on concrete, brick, tile or lath.



**The Best Bros. Keene's Cement Co.**

Established 1889

Dept. A, Medicine Lodge, Kansas  
NEW YORK CHICAGO



It is a fact that the contractors who are using the most "CHICAGO AA" Portland Cement, are the ones who have been using "CHICAGO AA" longest.



## We Help the Dealer Increase His Business

A Dealer's Aid Publicity Bureau has been established for the benefit of our trade.

Any dealer who sells

## Monarch Brand Hydrated Lime

has the advantage of this Bureau free of charge.

We can show the average dealer how he can increase his sales by using our Dealer's Aid Bureau.

*Write us at once for details.*

**THE NATIONAL LIME & STONE CO.**  
CAREY, OHIO

Tell 'em you saw it in ROCK PRODUCTS AND BUILDING MATERIALS

PETER MARTIN Pres. & Gen. Mgr

JULIUS M. MARTIN, Asst. Gen. Mgr.

**Capital \$1,500,000**

# THE OHIO AND WESTERN LIME CO.

Manufacturers and Wholesale Dealers in

**Ground Lime, Lump Lime, Fertilizer, Rock Wall Finish, Hydrated Lime, Cement, Plaster, Hair, Etc.**

**CAPACITY 8000 BARRELS PER DAY**

We have large stone crushers at various places. We make a Magnesia and high Carbonate of Lime. All of these limes are the very best on the market.

**THE LARGEST IN THE WORLD**

**WORKS AT** Huntington, Ind.; Fostoria, O.; Gibsonburg, O.; Sugar Ridge, O.; Tiffin, O.; Genoa, O.; Limestone, O.; Lime City, O.; Portage, O.; Marion, O.; Bedford, Ind.

**OFFICES AT**

Huntington, Ind.

Marion, Ohio.

## BANNER HYDRATE LIME

**IS STILL IN LINE**

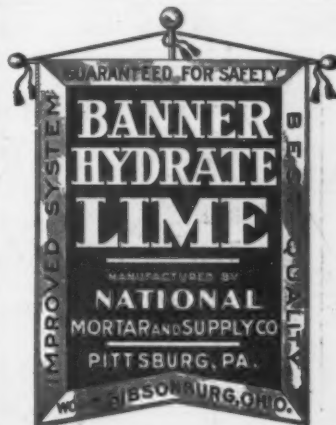
**NOT YET CENSURED BY  
THE WAR LORDS OF TRADE**

FOR INFORMATION WRITE

**NATIONAL MORTAR AND SUPPLY CO.**

A. H. LAUMAN, President

PITTSBURGH, PA.



## HYDRATED LIME

**Its Marvelous Increase In Consumption**

### The Kritzer Service

Any lime can be successfully hydrated by our process; but whether your lime can be hydrated and successfully marketed is another question. We study your proposition and the possibilities of its commercial success, and advise you accordingly. Our ten years' experience in the business is a valuable assistance in this. Ours is not a mail order proposition. We investigate our customers' proposed plant thoroughly before we will enter into a contract with them. We turn down more prospects than we advise to go into the business. We can't afford to have any failures. Our customers' success is our success.

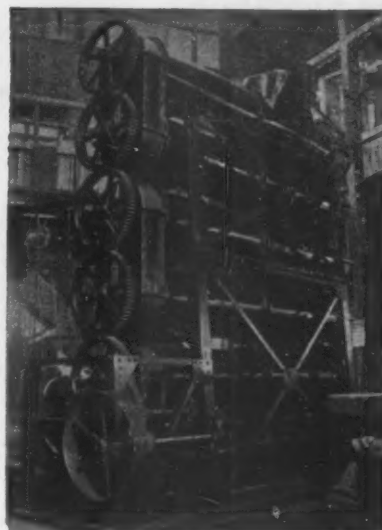
**WRITE TO US**

### Are You Meeting the Increasing Demand for Hydrated Lime?

There is nothing forced or unnatural about the growing popularity of this product. It is a natural growth resulting from a widespread awakening to the advantages of Hydrated Lime for a variety of uses—as waterproofing for Concrete, in wall plaster, and in almost every case where lime is called for. In hydrated form it is weatherproof, more easily handled, and better adapted to modern methods, both of commerce and construction. A continued growth of the demand may therefore be expected.

### The Kritzer Way

insures a product which will hold a continued place for itself on the market. We install plants complete, designed by our own expert engineers to meet your local conditions and turn out a uniform grade of Hydrated Lime of the highest standard, and with the greatest economy in cost of production. The Kritzer Continuous Hydrator, and the accessories installed with it, are the recognized standards in this line.



KRITZER CONTINUOUS PROCESS

**THE KRITZER COMPANY Chicago, Ill.**

Tell 'em you saw it in ROCK PRODUCTS AND BUILDING MATERIALS



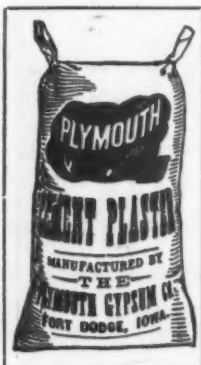
## We Want to Sell You PLASTER-- We Want Dealers to Represent US

We have the finest gypsum rock in the country and our plant is equipped with the latest and best machinery, this assures you that you will handle the very best line of plaster—when you represent us. **OUR MOTTO IS QUICK SHIPMENTS.**—We have a daily capacity of 300 tons. **Write us today for prices, etc.**

### KELLY PLASTER COMPANY

Sales Office: Sandusky, Ohio

Shipping Point: Castalia, Ohio



### PLASTER

WOOD FIBER  
PLASTER

Fireproof Partition Blocks  
Sackett Plaster Board  
Steel Studding

Known as Brands of Quality

WRITE US

PLYMOUTH GYPSUM CO.  
FORT DODGE, IOWA

It May Pay You To Purchase..... **Sewer Pipe  
Flue Lining  
Wall Coping**  
and other Clay Products

FROM

**The Thompson-Armstrong Co.**  
Provident Bank Bldg., Cincinnati, O.



United States Custom House and Postoffice, Omaha, Neb  
KALLOLITE PLASTER USED

## Kallolite Cement Plaster

Was used on the Omaha Post  
Office, as well as many other

**Government and Public  
Buildings.**

Kallolite Cement Plaster is manufactured from the Purest Gypsum Rock found in the United States as shown by last Government Report.

### CARDIFF GYPSUM PLASTER CO.

Write for literature.

FT. DODGE, IOWA

Tell 'em you saw it in ROCK PRODUCTS AND BUILDING MATERIALS



# BRICK ROADS

**ALTON BRICK COMPANY**

**ALTON, ILLINOIS**

Makers of High Quality Brick for  
**ROADWAYS AND PERMANENT BUILDINGS**  
REPRESSED AND DUNN WIRE CUT-LUG BLOCK.

## "WORK SCENES"

a new publication illustrating the fundamental steps of brick pavement construction, may be had for the asking.

## NATIONAL PAVING BRICK MANUFACTURERS ASSN.

WILL P. BLAIR, Secretary CLEVELAND, OHIO

F. LAWSON MOORES, President

W. W. CONEY, Sec'y & Treas

Factory:  
ZANESVILLE, OHIO

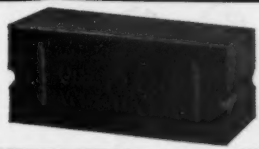
## THE HARRIS BRICK COMPANY

Manufacturers of  
VITRIFIED SHALE BRICK, HARRIS PAVERS

Office: St. Paul Building  
CINCINNATI

## THE METROPOLITAN PAVING BRICK COMPANY

Manufacturers of "BEST PAVING BLOCK MADE"  
CANTON - - - - - OHIO



## THE THORNTON FIRE BRICK CO.

Use "Grafton" Shale or Fire Clay Block  
for Permanent Pavements

CLARKSBURG,  
W. VA.

ROBERT W. HUNT

INO J. CONE

JAS. C. HALLSTED

D. W. McNAUGHER

## ROBERT W. HUNT & CO. ENGINEERS

BUREAU OF

## INSPECTION TESTS AND CONSULTATION CEMENT & STRUCTURAL STEEL

INSPECTION OF ALL CONTRACTORS' EQUIPMENT NEW OR 2nd HAND—INSPECTION OF ALL MATERIALS OF CONSTRUCTION

Tests of Paving Brick, Steel & Iron—Chemical Laboratories

ESTABLISHED OFFICES IN

CHICAGO

MONTREAL

NEW YORK

PITTSBURGH  
VANCOUVER

LONDON  
TORONTO

ST. LOUIS  
SEATTLE

MEXICO CITY

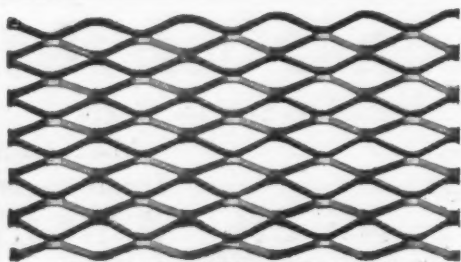
SAN FRANCISCO

SAMSON CEMENT  
SAMSON PLASTER  
PEARL HYDRATED LIME  
WATERPROOFING MATERIALS  
BUILDERS' SPECIALTIES

**SEWER-PIPE**  
HOLLOW TILE  
BUILDING BLOCK  
HOUSTON-BROS.CO. PITTSBURG

ROOFING SLATE  
BLACK BANGOR AND  
SEA GREEN  
GENASCO & NIAGARA  
ASPHALT ROOFINGS  
ALL SLATERS' SUPPLIES

Tell 'em you saw it in ROCK PRODUCTS AND BUILDING MATERIALS



SYKES EXPANDED CUP LATH  
SELF-FURRING  
HAS NO EQUAL FOR

### STUCCO WORK

Furnished with either an anti-rust (oil) coating, painted black or galvanized, packed in bundles containing 20 square yards, size of sheets 18x96 in.; in gauges 27, 26, 25 and 24.



### SYKES "IMPERIAL" SHINGLE.

SIZE 10 x 14 and  
14 x 20 INCHES.

We also manufacture all styles of roofing and siding, such as corrugated, v crimp, pressed standing seam, roll roofing, brick siding, weather board siding, beaded ceiling, etc.

## Sykes Metal Lath

Present opportunities for the dealers to double their sales in this line, as Architects are specifying and building contractors are using SYKES products.

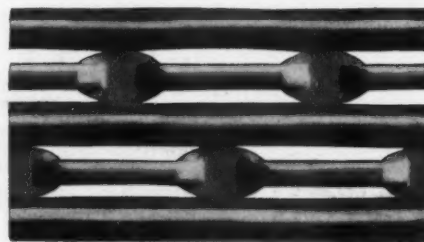
### BASIC REASONS

SYKES EXPANDED CUP LATH is self-furring. This greatly reduces the cost of construction on every building where it is used. It is more economical in the amount of plaster required than any other expanded lath. Quickly erected as both sides are alike, cannot be applied wrong.

SYKES TROUGH SHEET LATH is incomparable in its utility for inside plaster work. Can be used to great advantage on any kind of a building. Unusual design, strength and keying principle.

### WHY NOT HANDLE OUR PRODUCTS AND INCREASE YOUR PROFITS.

Write us at once for our SPECIAL EXCLUSIVE SALES PROPOSITION, SAMPLES, ETC.

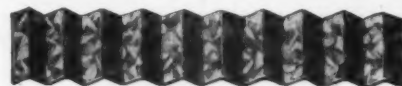


### Sykes Trough Sheet Lath

The Strongest and  
Most Durable Lath Made

### Perfect for Interior Work

Furnished with either an Anti-Rust (oil) coating, painted black or galvanized. Size of sheets, 13½, 15½, 18½, 23½ in. wide by 96 in. long.



### SYKES WALL TIE

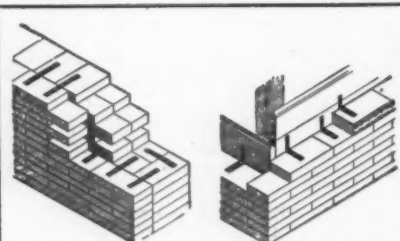
Standard Tie 7 in. long  
Veneer Tie 6 in. long

We also make Metal Corner Bead

**THE SYKES METALLATH & ROOFING CO.,**  
508 Walnut Street, NILES, OHIO



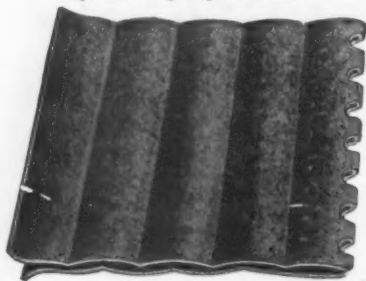
Whalebone Wall Ties



Tie for Solid Wall

Tie for Veneered Wall

2½ inches long x 2½ inches wide



Nailing Plug

## When a Wall Tie is a Wall Tie it is the Whalebone

Made in any length from five inches to fifteen inches.

Standard size for Solid or Veneer walls 7 inches by ¾ inches, weighing 50 pounds to the M. Packed 1000 to the box.

Price on Standard size, based on 21 gauge material, \$2.50 Pittsburgh per M, subject to dealer's discount according to quantity of order. Shipments made same day order is received. Special propositions in open territories.

Can quote on lighter or heavier material if desired, as we can supply the Whalebone in boxes weighing from 35 pounds to the M to 85 pounds to the M, according to thickness of material.

### Allegheny Steel Band Co.

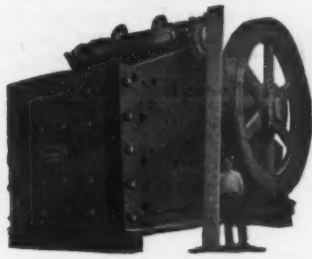
Bell Phone: 718 Cedar

North Side, Pittsburgh, Pa.

Tell 'em you saw it in ROCK PRODUCTS AND BUILDING MATERIALS



**Your Crushing Plant Cannot Exceed  
the Capacity of Your Crusher**



## TRAYLOR Heavy Duty Jaw Crushers

are strongly recommended as initial machines where economy and large capacities are desired.

In fact, considering power, wear and tear and repairs, there is no machine built that can be compared with the Traylor Jaw Crushers from the standpoint of economy.

The wearing parts of all sizes are of manganese or chrome steel.

All crushers are fitted with water cooled pitman and bearings, which provides a circulation of water around the shafts, thereby eliminating the heating of this, the most important operating part of a crusher.

*Write for Catalogue G2 and Details*

**Traylor Engineering & Mfg. Co.**

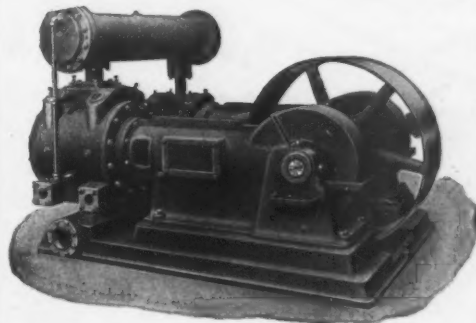
**Main Office and Works: Allentown, Pa.**

**N. Y. Office: 24 Church St.**

**Western Office: Salt Lake City, Utah**

## This Clayton Air Compressor

**Has Protected Working Parts**



The enclosed frame Clayton Air Compressor has a decided advantage under any conditions and is particularly desirable for service where moving

parts must be protected from dirt and grit, such as in stone works and foundries.

The enclosed frame makes possible the "Splash Oiling" system of lubrication which requires no attention; the connecting rod dips into the reservoir in the base of the frame and its motion floods all running parts with oil.

The cover plate secures all of these advantages; at the same time, it can be readily removed, affording quick access to all bearings, crank pin, wrist pin and cross-head guides.

*Bulletin C 206-58 describes this type in detail. Send for a copy.*

## Clayton Air Compressor Works

**Works: East Cambridge, Mass.**

**New York Office: 116 Broadway**

Atlanta  
Boston  
Buffalo  
Chicago

Cincinnati  
Cleveland  
Denver  
Detroit

El Paso  
Houston  
Kansas City  
Los Angeles

Louisville  
New Orleans  
Philadelphia  
Pittsburgh

St. Louis  
Salt Lake City  
San Francisco  
Seattle

Canadian Agents: Mussels, Ltd., Montreal.

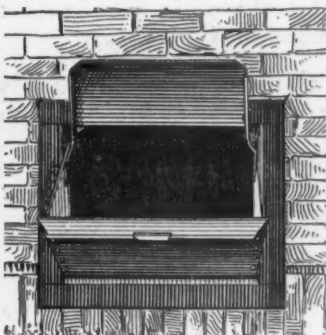
C 174.2

**You Can Make Bigger Profits  
Handling**

## Kewanee All Steel Coal Chutes

Every building in your town needs a Kewanee All-Steel Coal Chute, and someone is going to make a corking good profit handling them.

The Kewanee Chute is the only indestructible coal chute on the market. It is constructed entirely of boiler steel—it can't break or get out of order. It sells to the building trade on sight.



Kewanee Chute—Open

Furthermore, Kewanee Service will help you sell these chutes. Write for our agency proposition to-day.

**Kewanee Manufacturing Co.**

**Kewanee, Illinois**

## ? Are You Insured Against Stock Shortage

At the crucial time, when buildings are being completed, and the last payments, the PROFITS can be collected.

## Have You Anticipated ? The Car Shortage

That is sure to prevail when 1914 crops are being moved.

**IF NOT—GET BUSY**

**PLACE YOUR ORDER NOW FOR**

**"BOSTWICK"**

"TRUSS-LOOP" METAL LATH.

"TRUSS-V-RIB."

"DIAMOND" A EXPANDED METAL.

CORNER BEAD.

WALL PLUGS.

WALL TIES.

**The Bostwick Steel Lath Co. NILES, OHIO.**

Tell 'em you saw it in ROCK PRODUCTS AND BUILDING MATERIALS

## An All Around Seller

You can catch the smaller work as well as the largest jobs when you sell

### Tiger Brand Hydrated Lime

No plastering material can give better results on either white coat or scratch and brown coat work.

Still it spreads easily, goes far and cuts down the labor cost to a minimum.

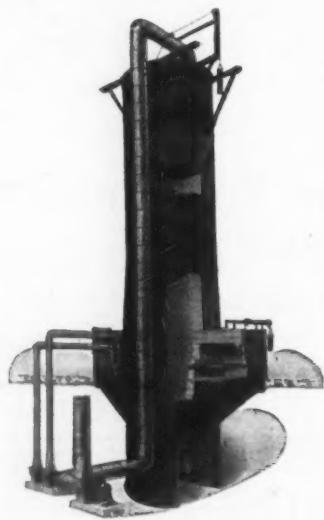


**The Kelley Island Lime  
& Transport Co.**  
Cleveland, Ohio



Sixteen Residences in Toronto plastered throughout with Tiger Brand.

### Doherty-Eldred Lime Kiln



**The Improved Equipment Co.**  
COMBUSTION ENGINEERS

6 Wall St., New York City

Complete Coal Gas Plants  
Complete Lime Burning Plants  
Gas Producers

Lime Kilns  
Special Industrial Furnaces  
Refractory Materials



## "Lehigh on the Job"

Twelve great mills—each strategically located on the main arteries of transportation—serve a nation with Lehigh Portland Cement in record-breaking time.

Our pride in our speedy delivery keeps pace with our pride in the quality of our product. Our "delivery pledge" is as sacred as our ideal to make the best cement.

We have scattered our mills from the Atlantic to the Pacific so that our deliveries everywhere might be unequalled in point of speed.

## LEHIGH PORTLAND CEMENT

You are NEAR a Lehigh Mill. Your Supply will speed to you the shortest way in the shortest time. No time-killing, money-losing delays.

Today, one-tenth of all the cement used in this country is Lehigh. We offer that as indisputable proof of Lehigh quality.

DEALERS AND BUILDERS: Test our "QUICKEST DELIVERY POSSIBLE" service.

## LEHIGH PORTLAND CEMENT CO.,

Main Office, Young Bldg., Allentown, Pa.

Western Office, Consumers Bldg., Chicago, Ill.

Pacific Office, Old National Bank Bldg., Spokane, Wash.

12 Mills—Annual Capacity Over 12,000,000 Barrels.

Tell 'em you saw it in ROCK PRODUCTS AND BUILDING MATERIALS



# Rock Products and BUILDING MATERIALS

INCORPORATING DEALERS BUILDING MATERIAL RECORD

Volume XIV.

CHICAGO, SEPTEMBER 7, 1914.

Number 9

PUBLISHED SEMI-MONTHLY.

DEVOTED TO

Quarry Products, Cement, Lime, Plaster, Sand and Gravel, Clay Products and Building Specialties—Fireproof Building and Road Construction.

THE FRANCIS PUBLISHING COMPANY.

EDGAR H. DEFEBAGH, Prest.

Seventh Floor, Ellsworth Bldg., 537 So. Dearborn St., Chicago, Ill., U. S. A.

Telephone: Harrison 8086, 8087 and 8088.

EDITORS:

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GEORGE A. OLSEN, Editor Retailers' Section. F. G. PULLEY, Associate Editor.  
H. F. AKE, Secretary.

DRUSUS H. NICHOLS, Advertising Manager.

Communications on subjects of interest to any branch of the industry are solicited and will be paid for if available.

Every reader is invited to make the office of Rock Products and Building Materials his headquarters while in Chicago.

Editorial and advertising copy should reach this office at least five days preceding publication date.

TERMS OF ANNUAL SUBSCRIPTION.

In the United States and Possessions.....\$1.00  
In all other Countries in the Postal Union.....\$1.50

Subscriptions are payable in advance, and in default of written orders to the contrary, are continued at our option.

Advertising rates furnished on application.

Published on the 7th and 22nd of each month.

Entered as second-class matter July 2nd, 1907, at the Postoffice at Chicago, Illinois, under act of March 3rd, 1879.

Copyright, 1914, by E. H. Defebaugh.

Plaster orders is the big feature these days.

This is the time for the development of the fine points of salesmanship.

A large number of jobs, with their roofs completed, are being pushed to completion.

Now is the time to use a little salesmanship and push to roll up the orders for plaster board.

The fag end of the building season is lapping over into the rush of coal deliveries with many of our dealer readers.

In spite of the general depression, statistics fail to show any noticeable falling off in building materials. At least that is the way the dealers tell it to us—with a few exceptions, of course.

Power tractors in road work are proving their efficiency and dependability for moving road material on a business like basis. The Lord knows the farmer boy with his fat, grass-fed teams and dilapidated yard box has always been an unknown quantity except on pay day, but plenty and enough then.

Concrete products will come into their own and be recognized before the golden age of cement can dawn. This is the only path to reach 99 per cent of all the little building jobs that only come to a few dollars. The building jobs amounting to less than \$1,000 are so numerous that when they are taken by their aggregate the price of all the city skyscrapers sinks into insignificance. Intelligently made and marketed cement products is the only route to get the business.

Farmers will now take a few weeks to make the improvements that have been waiting all summer. They will soon have the money and will feel like spending it for they are having the inning of their lives.

The road improvements of this country will not be completed this century. We have not yet reached the stage where we can afford to tear up a big stretch of road that is far above the average of such improvements to replace it with one of a new type slightly better. All of the new work can be much more effectively placed where there are very bad roads at present, and so make the money more effective. It is still easy enough to give full value for every nickle of road appropriations. Future supplies of road funds will depend largely upon the recognizable difference that such expenditures show to the public.

In the past few years we have been studying the basic principles of coöperation. In every trade and every kind of business we have a coöperative association. We have recently learned how to concentrate the principle into an association of nation-wide influence at once representative of all of the various lines of trade in a single representative body. Having found that coöperation instead of competition proves better in one line of business after another, it was only a step to undertake the coöperative idea upon a national basis and organize the Chamber of Commerce of the United States, which is doing the work for business and commerce in a broadly representative way, being better understood with each succeeding example of its activity. This, perhaps, points the way for the bigger and grander coöperation between nations without rivalry and shall forever eradicate the last vestige of ancient barbarism, whose modern name is Competition in Trade.

There is a great deal of discussion these days over the trade opportunities offered by the open and unsupplied ports of South America and elsewhere. On top of this advantage is added the completion of the Panama Canal. The time to go after that business is right now. The traders of the ports of Chili, Peru, Argentina and Brazil are expecting our commercial envoys at this moment. Business in immense volume waits attention. Don't procrastinate and thereby cause the abandonment of activity in the expectant markets for the sheer lack of supplies. Pay no heed to the half-baked sophistries and untrue conclusions about finance and the merchant marine. Big steamships of mammoth proportions are not over-essential. Just load out every available bottom in New Orleans, New York, Philadelphia and Boston and other ports to capacity. An astonishing tonnage can be moved at once in this way. If the financial system is really paralyzed, incompetent or otherwise out of line, just forget it for the time being, and get the business with its profits by the route of industrial scrip at home, and the clearance of return cargoes to absorb and retire the scrip by the medium of coöperative commercial exchanges. This was done successfully in Venice five hundred years ago, and it will work better now than it did then. A cargo of coffee or sugar will usually pay for any outgoing cargo, and then some. Direct trading always eliminates very expensive intermediary costs and charges. Do it now, before the opportunity ebbs, possibly never to return again.

## Full Grown Competition Becomes War

Curiosity is not the sole explanation for the thirst for the first report from the seat of war, but is traceable to an unexpressed but inherent conviction that out of the struggle important changes to the basis of our civilization is bound to occur, the which will effect the conditions and environment of the pursuit of happiness in the immediate future.

Every man who does his own thinking realizes that war is the forge of civilization on which heated and quickened passions and conclusions in the minds of men are shaped and formulated suddenly into new creatures and instruments of government, like the blow of the smith upon hot iron shaping it to his liking. Never has the awful forge of war taken on such a heat as the present conflict.

Back of the tramp of armed men and the rush of steeds, with the roar of artillery and the dread of hostility in the very air, is concealed the primal cause of war. Human intellect, concentrated upon the awful contention of competition, which is the worst blot remaining in our particular type of civil-

ization. "Western civilization," in the term of the historian.

### Competition of Commerce Cause of War.

It is the civilization of trade and commerce, first started by the Venetians, when their ships began to trade in all the waters of the known world, making Venice the central mart and first rich mistress of commerce. First Genoa grew to importance, and later the ports of the Netherlands became rich in commerce, rivaled Venice, and by the formation of the Hanseatic League so absorbed her trade as to make proud Venice a second power, afterwards to sink into insignificance. Such is the inevitable course of competition.

The great league was co-operative within its own members, so that the traders of Antwerp and Amsterdam, of Rotterdam and Liepsig, those of Lubeck and Hamburg, of Frankfort and Bremen, all worked together on the high seas and in foreign ports each assisting and helping one another to

maintain controlling markets in the specialties to which each of them devoted their principal attention. The carpets of Brussels, the handiwork from a thousand shops and forges, the tapestries and laces from Bruges and Ghent, soon became adjectives to describe the wares of imitators in all parts of the world, even unto this day. The jewelers of Rotterdam, the goldsmiths and silversmiths of Amsterdam, and the whole list of commodities besides, made commercial names and reputations that have not yet passed away. Even through the dark period of the Spanish oppression, the wealth and power derived from trade profits which came out of the control of the world's commerce on the high seas was sustained. It yet lingers and is the basis of the primary contention of German arms this day and this very hour.

Out of the convulsions of war just one hundred years ago, in the same theatre as that occupied by fighters of today, English diplomacy backed by the use of British arms on the memorable battle field of Waterloo seized the mastery of the world's commerce, and proceeded to dictate the conditions of trade in every port, as her right. With the profits from it she has grown fat, rich and powerful almost beyond conception, and once only described by the great Webster in his Bunker Hill oration. This is the real basis of England's part and interest in the contention.

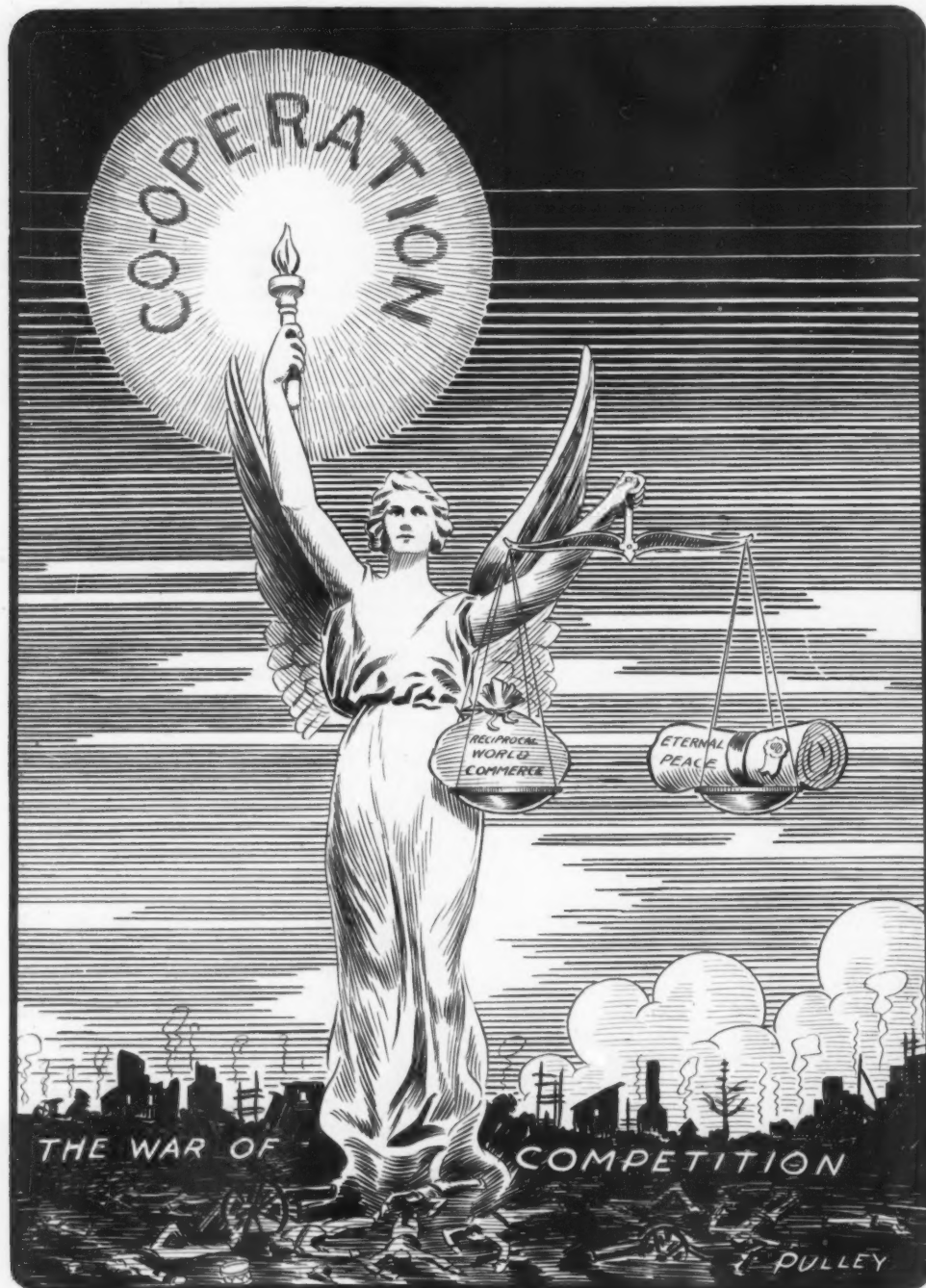
The recent growth of commerce and increase of trade and wealth of German posts supplied by the wonderfully inventive and scientific industrial Germany, has won a larger share in the profits of the world's commerce than the English traders could maintain. So competition in trade, the division of commerce between these great powers is the supporting cause of the present conflict.

### Commercial Profits Must Pay for War.

The victor, no matter how the fortunes of war may determine the conflict, will take the cost and charges of the whole matter out of the profits of commerce, after the settlement by force of arms has been completed. So the competition of trade, mixed up and colored with race prejudice and sentimental national pride is driving one half of that portion of the human family who understand and live under our type of civilization to strike the loud alarms of war, and carry fire, and sword into the midst of their neighbors. The other half is looking on, spellbound, aghast, at such a spectacle coming to record in this twentieth century, that we are wont to proclaim as the period of light and progress, peace and contentment. No! All such ideals are thrown to the wind, and the highest accomplishments of science are invoked and directed in the same kind of destruction and ravage that history has depicted to us as characteristic of the dark ages.

Competition in trade, the control of the commercial markets, the exclusion and elimination of possible competitors; the reprisals, embargoes, port charges and other tributes levied and collected by the powerful upon the weaker traders is the accepted system of control, for which the battalions are now struggling in arms upon the fertile fields of France. Whatever the cost of the present war—it will be such an enormous sum as to be beyond comprehension—that sum, whatever it is, will be the cost to the victor of the exclusive control of commerce in the world's markets. This enormous sum will be divided and parcelled out upon every shipment of every kind of ware, and for every measure and every type of floating bottom. No ship in any port will be allowed to escape, no crop in any field, nor the product of any mine or any mill will be able to escape paying tribute to the dictator of future commerce, and the future financial system which will surround and be a part of the propaganda of the victor in the present war.

The losses will effect us in this country as they will in every other country, because it is impossible to destroy such a large fraction of the total wealth



LET HUMANITY BE THE VICTOR.



of the civilized nations of the world without the necessity for replacing the major part of that destroyed by future human effort, and this is of itself primary cost.

#### America Must Help Pay Up the Losses.

The greatest wisdom on our part as neutrals to the combat is clearly that of assuming such a position as to confine all replacement costs to the boundaries of the countries who have sustained the losses, and probably the only way to accomplish this with certainty is to cease all intercourse with those depleted nations for many years to come. But this is impossible. Any other way requires the constant watchful care of able diplomats, to barter and trade by treaty at wholesale for the benefit of individual shippers and buyers trading in the markets of the depleted countries at present engaged in war. Our country has never been renowned for the diplomats that she has produced, and it is almost certain that ours will be no match for the informed publicists who will be chosen by foreigners to make the new trade and commercial arrangements. By this route our country is quite certain to pay very considerable contributions to the cost of the war in trade relations for many years after the story of the battles have passed to the realm of poetry and the pages of history.

But even so much being taken for granted, it does not follow by any means that serious business depression can follow as a result of the war, especially in this country, which is taking up the burden of responsibility of producing and supplying practically all of the deficiencies brought about by the abandoned industries, quarries, mines and farms of the war-ridden countries. On the other hand it means the distinct quickening of activities, beginning at once and continuing into the future for a number of years, until the full adjustment and reorganization of foreign operations can be resumed.

#### Opportunity for Foreign Trade Expansion.

If the abandoned markets of the world can be supplied promptly, efficiently and upon a scale of prices parallel with established values, there is no reason why a very large share of the trade cannot be retained and made a part of future American business life, even though it takes a naval war with the victor of the present conflict to establish our recognition in the possession of such commercial rights. Certain it is, that we have the responsibility of providing nearly all of the supplies that have gone formerly from the German and the English initial ports to the markets of the world.

Whether we are able to absorb and consume the reciprocal cargoes, which the traders of foreign ports will expect and demand in the interchange of commerce, upon a permanent basis, is a matter for American statesmanship, guided by good commercial judgment to work out in the future. Anyway, this erects a new vista for American industries, and for the American business man. Whether these things are compatible with our ideals, or our desires, or our needs, the future alone can tell. Present activities clearly show that we have immediately in front of us a very busy period, and in a deliberate, business-like way the leaders in each and every line are taking advantage of conditions, and getting their operations shifted to a scale commensurate with the apparent and certain demands that are held out to them.

#### Perhaps the Triumph of Civilization Is At Hand.

It may be, that out of the womb of all this contention the birth of a new thought will come to achieve a higher plane for future commercial relations than anything that has yet been attained, one in which our civilization will blossom forth and triumph under trade conditions where competition is eliminated and the civilizing principles of co-operation prevail. This would make such a war as the present an impossibility, and remove forever, the necessity for navies and armies, with all of their attendant cost, damage and human anguish.

## The BUILDERS' POET

### THE MAELSTROM.

#### I.

Across the broad Atlantic, everybody's going frantic,  
And are shooting up each other in a mediaeval scrap;  
English, Belgian, French and Russian vs. Austrian, German,  
Prussian,  
Are changing the complexion of the European map.

#### II.

Like other kinds of trouble, it has piled upon them double;  
The fighting fever's got 'em and they've lost the antidote;  
All the tales of Caesar's glory seem a gentle "Pansy" story,  
When you read about the battles where the bloody war clouds float.

#### III.

The English are forgetting all the gory suffragetting,  
The Ulsterites are drilling while they shout, "God save the King!"  
While the Czar's last proclamation is the solemn declaration  
That the Hebrews are his children and he'll give them anything.

#### IV.

And as for William Kaiser, he's a daily early riser,  
And spends each day explaining with his fingers tightly crossed,  
How his gentle, kindly feelings, were repaid by double dealings,  
And he's fighting simply to redeem the self-respect he lost.

#### V.

The papers tell us daily sick'ning stories of the melee,  
Till we think his grace Satanic must be on the job again;  
Mobilized his loyal legion in the Franco-German region,  
And established his headquarters somewhere near Alsace-Lorraine.

#### VI.

No one knows just how it started, but the millions, broken-hearted,  
Will recall this year of horror, and regrets will be in vain;  
For when all the clouds have lifted, and the reasons why are sifted,  
Thirst for Power, and Greed, and Glory as the answer will remain.

—Frank Adams Mitchell.

Such a pronounced step in the advance of civilization would be worth even such a cost and such a shock as the present conflict, and it is hardly to be expected that such a tremendous change could be brought about with less travail or smaller irruption of precedents to change the curse of competition between nations and transform present ideas of commerce into co-operation. This would well nigh introduce the cure for all human ills and griefs, and with one sweep raise civilized man to his rightful level in the image of God.

If such a form is shaped upon the forge of war, and afterwards tempered with all the considerations that surround the idea of co-operation, then this conflict will not be in vain, for it will mark the last shock of the old order of things inherited through all the centuries from the barbarians, and we shall emerge into a new life of that true civilization which we have been striving for since the gloom of the Middle Ages.

### The Mythical Value of Prison Labor.

County Engineer Thomas, of Leavenworth, Kan., is proceeding to complete the resurfacing of the road leading into Kansas City with free labor instead of the convict labor with which the job was begun several months ago. Mr. Thomas declares that with the new crew he has done more work in one week than the prison gang did in six weeks' time. The work is now progressing nicely with little or no complaints on the part of the workmen either about

the weather or anything else. While the prison gang was on the job there was so much sickness and complaint on account of the heat, and every other trivial detail, that it was impossible, according to the bosses, to make any headway whatever. Engineer Thomas considers that the employment of free labor to complete the improvements will demonstrate that it is cheaper to hire men who want to work to carry on road improvements than it is to try to depend upon the mythical value of prison labor.

Beyond a question it will be found in practice and in all the calculations of the good roads movement now intensely interesting to the whole country, that the suggestions with regard to using convict labor in road improvements will have very similar experiences to those encountered by the engineer quoted above. As L. H. Hawblitz, of Toledo, has said, "the reason why convicts are in the prison is because they are a worthless lot. If they were good for anything they would not get into prison." Experience has taught that the man who makes good in working on the highway has got to be something of a man—such a man as will make good on a job like road work hasn't got any place in the penitentiary and he never gets there." Without a doubt the best and probably the only way that road improvements will ever be successfully made is the same way that past experience has taught us to guide by from the successes of the past, and that is to secure the services of a contractor who has the equipment and a gang of men who know how to do such things and pay him for expert service and so get satisfactory results.

# WITH YOU and ME

The Joliet Sand & Gravel Co. has erected 24 bathhouses on the banks of Lake Remwick, south of Plainfield, Illinois. The lake is being constantly enlarged and is now the best bathing place for miles around, being from eight to 30 feet deep. The water comes from springs in the gravel bed, making it very cool even in the hottest weather.

The board of directors and the officers of the Superior Portland Cement Co., Seattle, Wash., were, with one exception, re-elected for the ensuing year at the annual stockholders' meeting a few days ago. Moritz Thomsen was elected to a place on the board of directors, to succeed G. E. Dickinson, purchasing agent of the company. The board of directors and officers of the company are: John C. Eden, president; W. D. Hofius, vice-president; A. A. Sutherland, treasurer; S. L. Barnes, secretary; James R. Stirrat, W. A. Monroe, James F. McElroy, Michael Earles and Moritz Thomsen, directors.

On Wednesday, Sept. 2, the marriage of Miss Clara M. Kortier to Mr. Carl H. Hartman took place at Delphos, Ohio. Mr. Hartman is assistant secretary and manager of the Urschel-Bates Valve Bag Co., of Toledo, Ohio, and is well known to users of bags in the lime, cement, plaster and ground stone industries. His pleasant disposition and straightforward and gentlemanly manner have appealed to all of his acquaintances and have been the means of securing the large number of friends who now extend congratulations and best wishes to the newly wedded couple. Mr. and Mrs. Hartman will be at home after November 1, at 21 Rockingham Drive, Toledo, Ohio.

Geo. H. Teffts, sales manager for the W. S. Dickey Clay Manufacturing Co., is also secretary of the International Clay Products Bureau, which is seeking to impress the value of fire clay for flue linings. Recently the bureau has gathered statistics of the actual proportion of residence fires due to defective flues, and the result is astonishing—from 12 to 45 per cent. The bureau is having some sample flues made which are lined with fire clay. These models will be placed in state buildings and wherever they can be made serviceable to the fire prevention campaign purposes of the bureau. The work of educating the public and the builders of chimneys is a broad one, and when one considers that it aims to a reduction of nearly half in the fire loss in residences, it becomes important.

The recent resolution which was passed by the state legislature of Pennsylvania, which, in a word, paves the way for the passage of a workmen's compensation law, is proving of no little interest to the cement manufacturers of that state. The workmen's compensation measure as drafted last year was defeated when it came before the legislature for approval, with the result that manufacturers and representatives of labor have been extremely active since that time in formulating a bill which is designed to meet with the unanimous approval of all concerned. There are in Pennsylvania 27 establishments engaged in the cement industry. The last United States census shows that in that state 8,080 wage earners and 8,902 salaried employees are engaged in this industry. The salaries amount to \$4,922,000. These figures give a good idea as to what extent the cement industry here will be affected by the law if passed.

P. Moriarity, formerly of Chicago, has become the manager of the gravel plant on Salt Creek north of Mt. Pulaski, Ill. The business and sales office of the company is located at 537 South Dearborn street, Chicago.

O. H. Hodson, city salesman of the Hydraulic-Press Brick Co., Kansas City, is visiting relatives in Ohio, and J. H. Blackner, country salesman, is taking Mr. Hodson's place among the Kansas City trade.

C. E. Thomas has taken up the management of the Decatur Sand & Gravel Co., at Decatur, Ill.

Richard K. Meade, chemical, mechanical and industrial engineer, Baltimore, Md., reports that the big hydrating mill which he has been building for parties in Dutchess County, N. Y., is now rapidly approaching completion and will come into bearing within the present month.

R. J. Potts, Professor of Highway Engineering in the Agricultural and Mechanical College of Texas, has resigned to take up the management of the Potts-Moore Gravel Co., which he has organized, and will have general offices at Waco, Tex. They will go actively into the highway construction business.

Portland cement and asbestos fiber made into large slabs or boards under pressure supply a new building material of Switzerland and other parts of Europe. The slabs, an inch thick and about 4 by 15 feet in area, may be cut as desired at the factory and are adapted for outside walls, inside finish, certain furniture and many other uses.

The Ceresit Waterproofing Co., of Chicago, which recently received "an order for 28,000 pounds of Ceresit and it can't be shipped," has now found a way out of this predicament and the waterproofing has gone forward to England. While the demand for its popular product has been rather quiet in this country, some nice orders have come in from Buenos Aires and from Japan. The foreign demand is coming in strong.

W. L. Sperry, president of the Hydraulic Cement & Manufacturing Co., Cumberland, Md., is at present enjoying an automobile trip through the New England states. Mr. Sperry believes that when the greater part of the year is spent in the "hustle and bustle" of business, a man owes it to himself and to the firm he labors for to take an occasional short rest—or even some strenuous pleasure such as automobiling.

The total consumption of cement for good roads in the United States this year will be about nine million barrels, it is estimated. The most notable road improvements with concrete at present under way are those in New York state, whose highway department will, by the end of this year, have built 250 miles of concrete roads. The principal one of these is the lake shore road between Buffalo and Rochester. Another famous concrete road now under construction is one 25 miles long at Zanesville, Ohio.

General Manager Fred B. Franks, of the Bath Portland Cement Co., of Allentown, Pa., has planned enlargements at the fine cement plant in his charge. One of the notable improvements is the installation of a modern electric grab bucket crane, manufactured by the Sheppard Electric Crane Co., Montour Falls, N. Y. The work was done under the supervision of Mr. Gledhill, the Philadelphia manager. Mr. Franks has also awarded a contract for a new corrugated steel roof for the kiln building and several other structures at the plant.

## Scheduled Meetings and Shows.

Sept. 9, 10, 11.—National Paving Brick Manufacturers, Buffalo, N. Y. Statler Hotel.

Oct. 3 (Beginning)—Western Paving Brick Manufacturers' Association, Branson, Mo.

Nov. 9-14.—American Highway Association. Fourth American Road Congress, Atlanta, Ga.

Nov. 17.—Mar-Del-Col Building Material Dealers' Association meeting at Emerson Hotel, Baltimore.

Dec. 14-17.—American Road Builders' Association. Annual convention, Chicago.

Feb. 8, 9, 1915.—National Builders' Supply Association. Annual convention, Hotel Sherman, Chicago.

Feb. 10-12, 1915.—Illinois Lumber and Builders' Supply Dealers' Association. Annual convention, Hotel Sherman, Chicago.

Feb. 10-17, 1915.—Eight Annual Chicago Cement Show. Coliseum, Chicago.

Although the Trenton pottery owners have already been notified that the prices on European clays and other materials used by them have advanced considerably, it is not likely that Trenton, N. J., will be affected for some time, it is said, as all potteries have a supply which will last from six to nine months. Fully two-thirds of the clay and gloss materials used there come from England and France.

The annual election of the Helderberg Cement Co., Albany, N. Y., held recently, resulted in the choice of these directors: Robert C. Pruyn, Frederick W. Kelley, James C. Farrell, Thomas E. Murray, James B. McEwan, Howard Van Rensselaer, Nicholas F. Brady, Frederic Pruyn, Peter McCabe, James C. Brady, William L. L. Peltz, Thomas I. Van Antwerp. For inspectors of election the choice fell upon Edward J. Hussey, Walter W. Batchelder and Thomas G. Hogan.

One of nature's wonderful works was unearthed a few weeks ago in quarry No. 15 of the American Lime & Stone Co., of Tyrone, Pa., in Armor Gap, after a large blast had been set off. It was in the form of a cave about 200 feet in length, with an average of six feet high. Throughout the interior brilliant stalactites hang from the ceiling, while the sides are covered with a crystal rock. The cave is in a solid mass of limestone fully 50 feet from the surface of the earth, yet a peculiar feature is the fact that the floor in many places is covered with a yellow clay. There are no crevices in evidence, nor can running water be heard.



# The RETAILER

## Co-operation of Dealers Needed.

Did it ever occur to you that the one element of progress in an industry depends on the reciprocal relations between manufacturer and dealer? It is true that the manufacturers of cement and plaster particularly have been very liberal in their investments of literature to teach the consumer, contractor and dealer. Unfortunately, however, there have been too many dealers in the business who have not put their shoulders to the wheel and aided the manufacturer to get the greatest publicity out of his books and other data that clearly showed to the more illiterate consumer the possibilities of improved construction in the home, barn, public building, etc.

Under facts gathered recently in a statistical way the rural demand for Portland cement per capita has been over one and one-half barrels per man. If co-operation could be complete whereby the manufacturer and dealer would each do his part toward teaching the consumer the possibilities for the use of cement or other products of the rock, this per capita sale would increase materially, which would mean instead of consuming ninety odd million barrels of cement and thousands of tons of plaster, lime, etc., such figures would be doubled. Therefore, it seems to us, Mr. Dealer, that it is only up to you to consummate this greater prosperity in our industry and particularly make it possible for you to make the building material line your main business. Instead of earning only \$2,000 out of this branch of your business, you would be getting \$10,000 out of it, because of the aggressive active work of increasing the consumption of building materials in your community. The same effort to increase this business can, if properly directed, develop a more progressive community and insure greater co-operation between farmer and merchant, professional man and laborer and thus you would be a patron as well as a good business man if you would join hands with the present effort for better organization and more co-operation between manufacturer, dealer and consumer for greater prosperity in the community in which you live.

## Confidence Begets Confidence.

Your confidence in your product is evidenced by your advertising, writes C. E. Raymond, vice-president of the J. Walter Thompson Co., in the Chicago Tribune. Your confidence in your country is evidenced by your continued advertising in the time of the "so-called uncertainty."

"So-called uncertainty" is a local issue. There is no uncertainty in the West and the Northwest, where the largest grain crops ever known are now approaching harvest. There is no uncertainty in the East, where the mills are getting busier than ever before.

The war scare of Europe is a bugbear for the timid only—because the hundred million people in the United States are going to continue to produce and consume just the same as though a sword had never been drawn.

The American people are the most adaptable and resourceful people on earth. In a fortnight we readily adjust ourselves to conditions.

And every adjustment makes new things and new uses for old things. What we formerly imported we will now produce, because a demand has already been created and must be supplied.

Those manufacturers and producers who instill the greatest amount of confidence in the minds of the public will reap the greatest rewards.

If your product is known, through advertising, to the consuming public, keep it so. Keep up that confidence the public has in you and your product.

If the price of your product has not been advanced, now is the golden opportunity to say so—an impression made at an impressionable time is the most lasting.

If you have been obliged to advance your prices, explain why—you will always find the American buying public reasonable.

Keep up the momentum your advertising has gained. Do not let the public forget you or your product. (And they surely will if you let up in your advertising now.)

And do not forget the public has not stopped consuming.

Before the Civil War the salt we used was largely imported. The difficulty in securing imports during the war hampered many industries, including hog packing, which was then located largely in Cincinnati, St. Louis and Milwaukee. A resourceful Yankee set about to produce salt at Saginaw, Michigan, and was successful. His success, followed by that of others, placed the United States upon a new and independent basis so far as the use of salt is concerned.

In 1907 this country was wondering about the effects of the money panic. A prominent Eastern publisher made a flying tour of the states. He talked with bankers, manufacturers, merchants and with everyone to whom he could talk. He found conditions sound—only a little lack of confidence. Upon his return east he authorized a large expenditure for the purpose of advertising his publications and the advertising in them. He created confidence in the minds of the readers and in the minds of his advertisers—and incidentally reaped rich rewards.

## Now and Won.

Procrastination is the bane of many a business, which if conducted along progressive lines of activity would be quite successful.

There is a tendency among some builders' supply dealers and their salesmen to "put off" calls upon prospective customers. Engagements which have previously been made are quite frequently ignored and for no valid reason, save that the germ of procrastination has affected the dealer or salesman who thus neglects to make the necessary calls upon the trade.

The familiar words, "DO IT NOW" are to be seen in a large number of builders' supply dealers' offices. This slogan is excellent and if carried into actual practice should produce much business. The time to call on a prospective builder or a contractor who is about to secure a new job is the minute that such news is secured.

Instructions to the salesman should always be followed with the words, "DO IT NOW." "NOW" is a small word of but three letters but a great aid materially in increasing the sale of cement, lime, plaster and builders' specialties.

Spell "NOW" backward and you have "WON."

The Hazard Lumber & Supply Co., of Hazard, Ky., has been incorporated for \$20,000. The incorporators are George M. Wolf, S. A. D. Jones and J. L. Johnson. The new company proposes to handle builders' supplies, lime, cement and probably brick.

## Expensive Ideas of Economy.

A practice which, notwithstanding the fact that resort to it almost invariably results in loss, in one way or another, to those who adopt it, has become steadily more common locally, is that of property owners having their building and general repair work done by irresponsible labor employed and supervised by themselves, instead of employing the services of a bonafide contractor who understands his business and who can be depended on to do the work thoroughly and stably and so to give the full value of the cost.

The complaints registered by contractors, complaints born of this practice, are heard more numerous each day, says the New Orleans Building Review. The owner of a piece of property will need and want certain building or improvement work done and will ask a number of contractors for bids on the same, furnishing semi-specifications with request for itemized bids. After securing the bids the property owner looks them over, thinks he has figured them out, and arrives at the conclusion that, by employing his own labor and supervising the work himself, he can have it done by day labor at a smaller cost than was bid by the contractors. He gets ahold of some irresponsible carpenter, bricklayer, or other artisan, haggles with the supplies dealers over the price of materials in an endeavor to have them come down on the estimated cost as given by some contractor in his bid on the job, and finally starts the work. Before the job is finished, it has cost the property owner more than would have been the case had a reliable contractor been employed, and the work is neither done in a finished manner, nor is it stable, in nine cases out of 10. In consequence the property owner is the loser, the contractors have been treated unfairly, and the jack-leg workmen are the sole gainers by the proposition.

It seems almost beyond belief that property owners with any degree of intelligence will permit themselves to be so deluded, especially with the innumerable examples which they have before them of the costliness of such experiments. It is a fact beyond questioning that for any one to believe, even though he has no experience, that he can have such work done in this manner as well and as economically as if it were given to a reliable contractor to do, is a most expensive fallacy, having been proven such many times over. And yet there are almost daily recurrences of such exhibitions of lack of wisdom and good judgment.

The practice in question is fast having the effect of making the contractor chary of offering bids when called on for them. Time is money with the contractor, and it requires time to figure out even the smallest bids—quite a deal of very valuable time. Necessarily the contractor can not otherwise than feel intensely impatient when he finds that the call for bids was purely a frivolous one—that the person asking for the bids has done so only with a view to gaining idea as to the cost of materials, labor, etc., intending, all along, to employ day labor and endeavor to direct the work himself, or to have it done under his own superintendence by jack-leg artisans.

The practice is a hurtful one, however viewed. It is difficult to devise any effectual remedy for it, since even examples of how costly it proves to property owners plainly have no deterrent nor corrective effect.

# Mar-Del-Col Dealers Permanently Organized

Retailers Hold Second Meeting at Baltimore, Adopt Constitution and By-Laws and Elect Officers—B. L. Grove, of Washington, D. C., Chosen President

The second meeting of the Maryland, Delaware and District of Columbia ("Mar-Del-Col") dealers emphasized the necessity and desirability of a building material association in every section where the products of the rock are handled through the retailer. The absolute harmony of representatives indicated they are only too anxious to put their shoulders to the wheel of real progress and consummate an organization for the education and promotion of a better condition in their particular section. The enlargement of the reciprocity spirit would include their customers on the farm and in their particular town. It evidenced a desirability for better lien laws; better handling of credits and more modern ways of merchandizing in the building material business. In reality a new impetus is given to the individual in this section to operate in building materials not as a side line, but as a particular line from which he expects to make his livelihood and his competence.

The 45 men joining this association in addition to 30 or 40 others who indicated their intention and willingness to be a part of this organization made this first step an enthusiastic one, and those who had participated in bringing it about felt their efforts were well rewarded by the absolute unanimity of opinion on every action designed for mutual help.

The representation from the manufacturers indicated what ROCK PRODUCTS AND BUILDING MATERIALS has always contended, that the producers of building materials were only too anxious to co-operate with business men, and all they have needed was for the retailer to do his part in the creation of more business loially and participating with the manufacturer in educating the farmer as to the possibilities of the product of the rock in the construction of farm buildings, feeding floors, silos, and other improvements.

The suggestions of the speakers as to the good to be gained by an organization, and the illustrations as to how a building material man might in his own locality be a community builder by getting a more friendly feeling between the merchant in the town and the farmer, as well as the builder of homes, churches and public buildings in the town itself, was recommended. The personal talks between dealers brought out even at this second meeting a little exchange of ideas of methods of handling and manipulating business which had a dividend paying objective. When the new president announced his desire to see the building material men in these states thoroughly organized on right lines, pledging his co-operation and asking the same of the individuals in the association, he was backed up by every new officer and there was evidence enough to all present that this new association would be one of the best in the history of commercial life in America. It only depends on the individual to do his part.

## Meeting Called to Order at 11 a. m.

The meeting, which was held at the Emerson Hotel, Baltimore, on Tuesday, Aug. 25, was called to order at 11 a. m. by Harry P. Boyd, temporary chairman. At the meeting held on Aug. 4, the dealers decided to call this second meeting for the purpose of perfecting an organization. Accordingly those who attended were there with but one object in view—the formation of a building material dealers' association.

In opening the meeting, the chairman took the opportunity of expressing his appreciation of the interest taken in the meeting and the large attendance on the part of the retailers.

Previous to calling the roll, two speakers whose association affiliations are known from coast to coast were called upon to address the assembled dealers. They were Charles Warner, of the Charles Warner Co., Wilmington, Del., and Mr. Edgar H. Defebaugh, editor-in-chief of ROCK PRODUCTS AND BUILDING MATERIALS.

Mr. Warner emphasized the benefits to be derived from a building material dealers' association and cited instances in other state and district associations where great benefits have been brought to the members.

Mr. Defebaugh confined his efforts to reciprocity



B. L. GROVE, FIRST PRESIDENT OF MAR-DEL-COL BUILDING MATERIAL DEALERS' ASSOCIATION.

and co-operation. He emphasized the fact that these two features must be most prominent in building material dealers' organizations in order to make them successful. Co-operation between competitors and reciprocity between men engaged in kindred lines of endeavor is essential wherever men organize associations for their mutual protection and benefit.

The roll call showed the following attendance:

J. Scott Hunter, Maryland Lime & Cement Co., Baltimore, Md.  
H. W. Classen, Maryland Lime & Cement Co., Baltimore, Md.  
Oscar L. Johnson, Rockville, Md.  
H. L. Brady, Lehigh Portland Cement Co., Allentown, Pa.  
B. L. Swett, Lehigh Portland Cement Co., Allentown, Pa.  
R. L. Cope, Allentown Portland Cement Co., Allentown, Pa.  
H. P. Boyd, National Bldg. Supply Co., Baltimore, Md.  
J. J. Kelly, Jr., National Bldg. Supply Co., Baltimore, Md.  
W. A. Hopkins, National Bldg. Supply Co., Baltimore, Md.  
J. J. Kelly, National Bldg. Supply Co., Baltimore, Md.  
T. Edward Clark, Washington, D. C.  
W. W. Shearer, Roslyn Supply Co., Washington, D. C.

C. P. Byrd, Robinson Clay Product Co., Baltimore, Md.

C. T. Kingsbury, Roslyn Supply Co., Washington, D. C.

E. H. Defebaugh, ROCK PRODUCTS AND BUILDING MATERIALS.

W. P. Ward, Farmers and Planters Co., Salisbury, Md.

M. C. Evans, R. G. Evans & Son, Salisbury, Md.

J. W. Smith, Smith & Reifsinder, Westminster, Md.

J. W. Campbell, J. M. Campbell & Co., Port Deposit, Md.

J. B. Emback, Charles Warner Co., Wilmington, Del.

Charles Warner, Charles Warner Co., Wilmington, Del.

Ralph Dinsmore, Charles Warner Co., Wilmington, Del.

Geo. F. Cornell, Charles Warner Co., Wilmington, Del.

J. R. Baxter, Charles Warner Co., Wilmington, Del.

H. E. Mitchell, G. E. Mitchell & Co., Salisbury, Md.

J. B. Tawes, Tawes & Gibson, Crisfield, Md.

W. G. Dutton, Coplay Cement Co., Philadelphia, Pa.

Clarence A. Woolever, Coplay Cement Co., Philadelphia, Pa.

Wm. L. Sperry, Cumberland Cement Co., Cumberland, Md.

Chas. L. MacNeal, Jas. B. MacNeal & Co., Baltimore, Md.

Stanley Evans, Evans Bros., Elkton, Md.

H. A. Heech, U. S. G. Co., New York, N. Y.

B. L. Grove, Grove Lime & Coal Co., Washington, D. C.

J. K. Barbour, Security Cement & Lime Co., Baltimore, Md.

L. A. Cover, Security Cement & Lime Co., Baltimore, Md.

H. S. Rayner, Security Cement & Lime Co., Baltimore, Md.

C. B. Fry, Keystone Plaster Co., Philadelphia, Pa.

Harry K. Hobart, Niagara Gypsum Co., Buffalo, N. Y.

Geo. H. Poehlmann, L. A. Poehlmann & Son, Baltimore, Md.

C. G. Waples, Milton, Del.

C. A. Erwin, Atlas Portland Cement Co., Baltimore, Md.

N. S. Goodwin, Barber Asphalt Co., Baltimore, Md.

Edwin R. Pusey, Edw. R. Pusey Co., Wilmington, Del.

E. L. Becker, Tidewater Portland Cement Co., Baltimore, Md.

W. B. Gardiner, W. B. Gardiner Co., Annapolis, Md.

J. G. Steffey, Steffey & Findlay, Inc., Hagerstown, Md.

J. E. Benjamin, C. A. Benjamin & Co., North East, Md.

J. Berkowitz, Berkowitz Bros., Mt. Rainier, Md.

H. A. Brown, Mathewson Lead Co., New York, N. Y.

J. W. Humphreys, The Adkins Co., Berlin, Md.

John D. Williams, L. E. Williams & Co., Salisbury, Md.

Quincee Ashburn, Pocomoke City, Md.

S. A. Ver Valen, Hudson Cement & Supply Co., Baltimore, Md.

John S. Bullock, John S. Bullock Lime & Cement Co., Baltimore, Md.



T. W. Perry, Chevy Chase, Md.  
W. E. Perry, Bethesda, Md.

**Absent Dealers Send Messages.**

In addition to the number of dealers attending, communications were received from several others. These were read and bespoke the enthusiasm of the rank and file of the retailers who could not attend the meeting.

Following the roll call it was decided upon the motion of Mr. Warner to appoint a nominating committee of three men for the purpose of nominating the officers. They were instructed to report at the afternoon session. This committee, as appointed by the chair, consisted of the following: Charles Watner, Wilmington, Del.; T. Edward Clark, Washington, D. C., and Henry W. Classen, Baltimore, Md.

During the recess, which was taken from 12:30 to 2 o'clock, an appetizing buffet luncheon was served.

**Afternoon Session.**

The afternoon session was called to order at 2 o'clock. The constitution and by-laws of the proposed Mar-Del-Col Building Material Dealers' Association was submitted by the constitution committee appointed at the last meeting. On the motion of Oscar L. Johnson, of Rockville, Md., the constitution was adopted as a whole. It follows:

**Constitution and By-Laws.**

**ARTICLE I.—NAME.**

This organization shall be known as the Del-Mar-Col Building Material Dealers' Association.

**ARTICLE II.—OBJECT.**

Section 1. This association is organized to promote closer acquaintance and to foster a freer exchange of thought and opinion among its members and to remedy such misunderstandings among the members thereof as may be injurious to their business interests; to disseminate among dealers in and manufacturers of a better knowledge of all matters pertaining to the building material industry by such means as may be deemed practical or advisable with a view to fostering and promoting greater efficiency, economy and co-operation among its members.

Section 2. It shall be the aim of this association to co-operate with other associations which may be striving to accomplish similar purposes, especially the National Builders' Supply Association, of which this association shall be a part.

Section 3. No rules, regulations or by-laws shall be adopted in any manner stifling competition, limiting production, restraining trade, regulating prices, or in contravention of law.

**ARTICLE III.—MEMBERSHIP.**

Section 1. Any firm, person or corporation located in Maryland, Delaware or the District of Columbia, and contiguous territory, regularly engaged in the business of dealing in building supplies and carrying a stock commensurate with the demands of the community may become a member of this association. No promises or agreements of any kind shall be requisite to membership, nor shall any penalties be imposed upon its members for any cause whatever.

Section 2. Manufacturers and importers of masons', plasterers', pavers', sewer builders', or other similar building material may become associate members of this association. All applications for associate membership shall be in writing and shall be filed with the secretary of this association. Associate members shall have the privilege of attending the meetings of this association except when the association is in executive session.

**ARTICLE IV.—OFFICERS.**

This association shall have as its officers a president, three vice-presidents, a secretary and a treasurer, and an executive committee, which shall consist of these three officers and four additional members, all of whom shall be elected by ballot. Of the four additional members of the executive committee, two shall be from Maryland, one from Delaware and one from the District of Columbia. There shall be one vice-president from Maryland, one from Delaware and one from the District of Columbia.

**BY-LAWS.**

**ARTICLE I.—MEETING.**

Section 1. The meetings of this association shall be held quarterly, the first Tuesday after the third Monday in August, November, February and May, unless otherwise ordered by the executive committee, and at such places as the executive committee may designate for the purpose of disposing

ing of unfinished business and taking up new business. The February meeting shall be the annual meeting and the officers shall be elected at that time.

Section 2. Special meetings may be called at any time by the president and shall be called on written request of 10 members of this association, stating the object of said meeting. At least 10 days' notice of all special meetings shall be given all members.

Section 3. Ten active members shall constitute a quorum for the transaction of business.

**ARTICLE II.—MEMBERSHIP.**

Section 1. All applications for both active and associate membership shall be in writing, and shall be filed with the secretary. Payment of the dues in this association shall include affiliated membership in the National Builders' Supply Association for the current year in which the applicant is admitted to membership.

Section 2. Eligibility shall be finally determined by the executive committee. Should the applicant be rejected the initiation fee shall be returned to him.

Section 3. Members should be present at all meetings of the association. If for good and valid



J. GRASON STEFFEY, SECRETARY MAR-DEL-COL BUILDING MATERIAL DEALERS' ASSOCIATION.

reasons a member cannot attend, he should notify the secretary in due time.

Section 4. Should any member enter into the business of contracting for brick, mason, plastering, sewer, paving or similar work, he shall forfeit his membership, unless otherwise ordered by the executive committee.

Section 5. In accordance with the ruling of the National Builders' Supply Association, this association shall be an affiliated body of the National association. Each member of this association shall be an affiliated member of the National association, and each five members of this association shall be represented by one delegate to the National Builders' Supply Association convention. Said delegates to be appointed by the president and ratified by the executive committee.

**ARTICLE III.—DUES.**

Section 1. The annual dues of this association shall be \$10, payable in advance. The fiscal year shall date from Feb. 1. Dues for members entering during the fiscal year shall be prorated.

**ARTICLE IV.—EXECUTIVE COMMITTEE.**

Section 1. The president of this association shall be ex-officio chairman of the executive committee, which has been provided for in the constitution.

Section 2. At the first meeting of the association, two members of this committee shall be elected to serve until the first annual meeting, and two members to serve until the second annual meeting, and at each annual meeting there shall be elected two members for a period of two years.

Section 3. The executive committee may and shall have the power to hold meetings at such times and places as designated by the president; to make or amend by-laws for carrying into effect the objects of the association; to appoint committees; to print and circulate documents in the interest of the association; to disburse the funds

of this association; to represent the association in all matters pertaining to the welfare and interest of its members, and to devise and carry into execution such other measures as they may deem proper to promote the welfare of this association.

Section 4. It shall keep an accurate record of all transactions and make report of same to the association.

Section 5. Five members shall constitute a quorum of the executive committee.

**ARTICLE V.—DUTIES OF OFFICERS.**

Section 1. The president shall preside at all meetings, call special meetings as provided for in the by-laws, notify the secretary of time and place of meetings, and attend to all other duties as may devolve upon him.

Section 2. The vice-presidents shall in their respective order perform all duties of the president in case of his absence.

Section 3. The secretary shall keep a record of the proceedings of all meetings, sign all orders on the treasurer of moneys ordered to be expended, attend to correspondence, send notice required by by-laws to members, and perform all other duties as may be required of him by the association. He shall be reimbursed for all money expended in the discharge of his duties, and shall receive such salary as may be decided by the executive committee.

Section 4. The treasurer shall receive all moneys belonging to the association, keep a correct account thereof and their disbursement, pay bills on the written order of the secretary, and make a true report of his transactions at the annual meeting, and at special meetings, when so requested by any member of the association.

Section 5. In case of the absence of an officer from a meeting, the members present may fill his place pro tem. Should a vacancy occur in any of the elective offices, it shall be filled by the executive committee.

Section 6. The secretary and treasurer may be required to give bond in such amounts as the executive committee shall decide and premium on the bonds shall be paid by the association.

**ARTICLE VI.—QUALIFICATIONS.**

The following shall be the form of application for active membership in this association:

To the executive committee:  
The undersigned certifies that he is regularly engaged in the building material business; operates a yard in which he receives, sorts and stores materials and from which stock is sold and delivered to consumers, and is not engaged in the business of general contracting or building, and if elected to membership the applicant hereby agrees to accept and conform to the constitution and rules adopted by this association.

**ARTICLE VII.—ORDER OF BUSINESS.**

1. Roll call of members.
2. Reading of minutes.
3. Report of officers.
4. Report of committees.
5. Communications.
6. Unfinished business.
7. New business.
8. Election of officers.

**ARTICLE VIII.—AMENDMENTS.**

These by-laws may be amended by a two-thirds vote of the members present at a regular meeting, or special meeting called for the purpose.

**Election of Officers.**

Following this, the nominating committee's report was submitted and, on motion, the secretary was instructed to cast a ballot for the officers as named by the committee. The new officers are as follows:

President, B. L. Grove, Grove Lime & Coal Co., Washington, D. C.

Vice-Presidents, E. R. Pusey, E. R. Pusey & Co., Wilmington, Del.; J. W. Smith, Smith & Reifsnider, Westminster, Md., and T. Edward Clark, Washington, D. C.

Secretary, J. Grason Steffey, Steffey & Findlay, Inc., Hagerstown, Md.

Treasurer, L. N. Hearn, L. N. Hearn & Co., Milford, Del.

Executive Committee, Charles Warner, Charles Warner Co., Wilmington, Del. (to serve one year); C. T. Kingsbury, Roslyn Supply Co., Washington, D. C. (to serve two years); H. P. Boyd, National Building Supply Co., Baltimore, Md. (to serve one year); W. P. Ward, Farmers & Planters Co., Salisbury, Md. (to serve two years).

An opportunity was given the retailers and man-



J. EDW. CLARK, JR., VICE-PRESIDENT FROM WASHINGTON, D. C.

Manufacturers present to become immediately affiliated with the new association. Applications were received from the following members, all of whom were elected:

#### Active Members.

Maryland Lime & Cement Co., Baltimore, Md.  
National Building Supply Co., Baltimore, Md.  
Hudson Cement & Supply Co., Baltimore, Md.  
John S. Bullock Lime & Cement Co., Baltimore, Md.  
L. A. Poehlmann & Son, Baltimore, Md.  
Roslyn Supply Co., Washington, D. C.  
Grove Lime & Coal Co., Washington, D. C.  
T. Edward Clark, Washington, D. C.  
Charles Warner Co., Wilmington, Del.  
E. R. Pusey & Co., Wilmington, Del.  
Oscar L. Johnson, Rockville, Md.  
Farmers & Planters Co., Salisbury, Md.  
R. G. Evans & Son, Salisbury, Md.  
G. E. Mitchell & Co., Salisbury, Md.  
L. E. Williams & Co., Salisbury, Md.  
Smith & Reifsnider, Westminster, Md.  
J. M. Campbell & Co., Port Deposit, Md.



EDWARD R. PUSEY, VICE-PRESIDENT FROM DELAWARE.

Tawes & Gibson, Crisfield, Md.  
T. W. Perry, Chevy Chase, Md.  
W. E. Perry, Bethesda, Md.  
Cumberland Cement Co., Cumberland, Md.  
Evans Bros., Elkton, Md.  
W. B. Gardiner Lumber Co., Annapolis, Md.  
Steffey & Findlay, Inc., Hagerstown, Md.  
C. A. Benjamin & Co., North East, Md.  
J. Berkowitz, Mt. Ranier, Md.  
The Adkins Co., Berlin, Md.  
Quince Ashburn, Pocomoke City, Md.  
H. Warner McNeal, Milford, Del.  
C. G. Waples, Milton, Del.

#### Associate Members.

C. P. Byrd, Robinson Clay Products Co., Akron, Ohio.  
C. M. Foster, Edison Portland Cement Co., Philadelphia, Pa.  
Chas. H. Bringham, Atlas Portland Cement Co., New York, N. Y.  
C. A. Kimball, Atlas Portland Cement Co., New York, N. Y.  
Lehigh Portland Cement Co., Allentown, Pa.  
Coplay Cement Co., Philadelphia, Pa.  
Jas. B. Maeneal Co., Baltimore, Md.  
H. A. Meech, U. S. Gypsum Co., New York, N. Y.  
Security Cement & Lime Co., Hagerstown, Md.  
Keystone Plaster Co., Philadelphia, Pa.  
Niagara Gypsum Co., Buffalo, N. Y.  
Tidewater Portland Cement Co., Baltimore, Md.  
Mathewson Lead Co., New York, N. Y.

Before adjourning, Mr. Oscar L. Johnson moved that a letter of thanks be sent to ROCK PRODUCTS AND BUILDING MATERIALS for the interest taken in organizing the association. A second motion was made by Mr. Boyd that the publication be made an honorary member. Both motions were unanimously carried.

After further brief discussions by different members the meeting adjourned at 4:15 p. m. to meet on Nov. 17, 1914.

#### Notes of the Meeting.

The representation at Baltimore was practically complete. Father Kelly appeared on the scene. Of course, C. H. Classen being on his vacation at Atlantic City was not present, but Harry was on the ground and acted as temporary secretary.

H. P. Boyd, temporary chairman is a man built for presidential honors; he served his state and county to the satisfaction of all present.

The Washington delegation participated in each session, but we missed our "Uncle Abe" Lincoln, of the National Mortar Co., Washington, D. C.

One of the first men to greet ROCK PRODUCTS AND BUILDING MATERIALS' man was Bert Swett, general sales agent of the Lehigh Portland Cement Co., at Allentown. He was helpful and added enthusiasm to the meetings.

Charles Warner, accompanied by Mrs. Warner and their son, had been on a trip down as far as Norfolk. They stopped over for a day. Mr. Warner made one of those inimitable talks which add interest and profit to those who hear him.

The sales forces of the various companies were very helpful in bringing about this association, particularly "Billie," better known as J. R. Baxter; he was a regular regiment in himself and represents the Charles Warner Co., in that section.

J. K. Barbour, sales agent of the Security Cement & Lime Co.; L. A. Cover, chairman of the board, and H. S. Rayner, of the active field force, were interested in encouraging all dealers to come into the association.

R. L. Cope of the Allentown Portland Cement Co., ran down to participate in the deliberations and push the thing along.

The biggest, fattest and roundest fellow in the bunch was E. R. Stapleton of the Tidewater Portland Cement Co., Baltimore, Md.



JOSEPH W. SMITH, VICE-PRESIDENT FROM MARYLAND.

One of the features of this new organization was the absolute participation of the National Builders' Supply Association through delegates, and this means ultimately a connecting link between all the dealers in the country through the national. Every state in the Union should have such an organization, and ROCK PRODUCTS AND BUILDING MATERIALS is willing and anxious to assist all of you in getting together, that the product of the rock may be handled more satisfactorily to all concerned.

Robert E. Griffith, president of the Giant Portland Cement Co., Philadelphia, Pa., came down and picked up a special contract that was on for cement.

The luncheon served by the association, right on the same floor, prevented the breaking up of this gathering and a continuous session was held from 11:00 a. m. until 4:15 p. m., notwithstanding weather conditions.

The plaster companies were represented by C. B. Fry of the Keystone Plaster Co., Philadelphia, and H. A. Meech of the U. S. Gypsum Co., New York City.



C. T. KINGSBURY, MEMBER OF EXECUTIVE COMMITTEE.



# How to Handle the Farmer

By FREDERICK D. CURTISS

## Discovers Need of Studying Traffic Regulations

Building Material Philosopher Busy Over Freight Tariffs and Interstate Commerce Rulings When Visited by Farmer Jones.

"This building material business is just one thing after another," remarked the Philosopher, with a weary air, looking up as Farmer Jones entered the office. "It used to keep us busy watching competitors for cut-throat tactics, and then we got rid of that trouble to a considerable extent through the formation of trade associations. Some of our friends, the manufacturers, took to bothering us by direct selling, and we had to teach those who were able to see the light that that policy was all wrong. Now comes a new ruling by the Interstate Commerce Commission which makes it necessary to study freight rates and classifications until one knows as much about them as the boss of a railroad. I wonder what the next thing will be."

"I didn't 'tumble' to this new problem until recently. Of course I knew that things sometimes came out in a different way than I had expected, and that a profit I had a right to look forward to went away without saying anything, but I never was moved to conduct an independent investigation of the railroad business."

"I haven't gone far enough yet to be able to say that I fully understand the situation, but there is a heap of news in what has come out so far. One is that the classification of freight is mighty important. Looking back over the files I find that when materials have been put in the wrong classification, it has cost me considerable in the way of overcharges. So far I have found no ease of undercharge. I suppose the railroad agents saw to that, but were not so particular the other way."

"Then the materials that are shipped in bags provide another chance for loss; the return of the bags also furnishes similar chances. Improper tying and handling of the bags puts the shipment of empty bags in a more costly class. Now comes this new freight rate ruling of the commerce commission, with its advice to the railroads about the

discontinuing of several items of free service, such as car 'spotting.' The building material trade wasn't hit as hard in the way of freight rates as I had feared, but there will be a number of new conditions to be watched closely, or I will be like the dog which a friend presented to a certain Scottish laird, who was noted even in Scotland for his frugality. One day, a few weeks later, the friend called at the home of the laird, and, finding the master was away, asked to see the dog. The gardener showed a lank greyhound.

"'No, no,' said the caller, 'this is not the same dog. I gave a mastiff to your master, not a greyhound.'"

"'Indeed, sir,' replied the gardener with feeling, 'any dog might soon become a greyhound by living here.'"

"'Some times I am of the same mind as a man in poor circumstances who has no auto and probably never will have one. Nevertheless he visited an automobile show, and while there met an acquaintance who expressed surprise.

"'It's like this,' replied the poor man; 'I like to come here once a year and look at a whole lot of motor cars that I don't have to dodge.'"

"By that I mean that some day the powers that be will finish tinkering with business and then we won't be required to step lively every few weeks to keep from getting under a new steam roller. I don't say, mind you, that business as a whole hasn't needed some regulating, but I will be mighty glad when it is all over, for present conditions are getting on my nerves. The trouble as I look at it is that we have too many lawyers and not enough business men in congress and in the legislature. The lawyers make the statutes, other lawyers haul business into the courts when they think the statutes are not being obeyed, and more lawyers charge high prices for trying to get business out of the trouble. So you see they give us the laugh all around, like old Bijé Wilson's horse."

"That nag was the prize balker of three counties. No one would take the beast as a gift, but Bijé hadn't quite got to the point where he wanted to shoot it. One day a neighbor drove up behind Bijé, who was stalled on a narrow road cut through a hill, not wide enough for two vehicles to pass. The neighbor stopped, and proceeded to make himself comfortable, waiting for the balky horse to start."

"Every few minutes Bijé's horse would turn its head and look around, and then Bijé promptly would shy a pebble at it, taking the stone from a box beside the seat that seemed to be well filled."

"'What are you doing that for, Bijé?' asked the neighbor. 'That won't start him.'"

"'I know it,' answered Bijé. 'I don't mind a horse balking now and then, but I'll be durned if he can turn around and grin at me about it.'"

"After a while when enough of us get tired of being run by the lawyers and laughed at beside, we will get some pebbles big enough to stop the whole performance. Business men who are large enough to work for the common good will get together and insist that this constant tinkering with conditions shall stop. By that time, I hope, the railroads will have learned that this country was

not built up solely for their benefit and the trust magnates will have learned that there are certain boundaries which they cannot pass. The big fellows make all of the trouble and when the law-makers and the courts try to remedy it, they stir up things for everybody. In the meantime we little fellows are like the kid at school. The teacher had trouble in getting the basic principles of the con-



"THAT NAG WAS THE PRIZE BALKER IN THREE COUNTIES."

stitution firmly fixed in the lad's mind and hit upon a homely expedient.

"'Now, son,' he said, 'I will give you three buttons. You must think of the first one as representing life, the second as representing liberty, and the third as the pursuit of happiness. Tomorrow I will ask you to produce the three buttons and tell me what they represent.'"

"'Next day he called upon the boy for the buttons and his lesson. The lad began to whimper.

"'I ain't got them all,' he said, holding out only two. 'Here's life and here's liberty, but mommer sewed the pursuit of happiness on my pants.'"

"'If you don't believe that the pursuit of happiness has been sewed up for the small business man, just ask any of them you happen to meet.

"'Every once in a while I have an experience that makes me think of the case of a neighbor and his auto. He was driving along a country road one day when he suddenly came upon a man who carried a gun on his shoulder and who was accompanied by a nondescript old dog. The dog was right in the road and although the horn was sounded he didn't move. The meeting place was on a curve and there was no chance to dodge the beast, so in a moment it was flattened out. The motorist stopped his car and went back.

"'Was that your dog?' he asked.

"'Yes.'

"'Very valuable?'

"'No, not so very.'

"'Will \$5 satisfy you?'

"'Yes.'

(Continued on page 20.)



"NECESSARY TO STUDY FREIGHT RATES AND CLASSIFICATIONS."

## BUILDERS' SPECIALTIES

### Salesmanship Creates Business.

An order taker is one who fills a demand already created. A salesman, on the other hand, is a man who creates sales where none existed before. The difference would be that a good order taker would have fulfilled his entire function when he secured the delivery of materials as ordered on the job without any loss or inconvenience to the various contractors using the goods. While if he was also a salesman there would appear on the complete statement a long list of items that he had put there by giving the customer a line of intelligent boosting talk with regard to materials not mentioned in the specifications but which nevertheless will contribute to the convenience and the economy of the job by his thoughtful and persistent foresight and careful presentation of the same.

This is not the time and perhaps there is no good time to scold and criticize or to throw bouquets, because the thing that is wanted is to find new orders and to increase the total of such orders as are on the hook or in sight. This calls for something which up to the present time has been sorely lacking in the builders' supply business as a general statement. Without making any reflections, it is true that the standard of salesmanship as represented by the builders' supply people representing this entire country is just about the lowest average of any line of comparable tonnage and importance. The steady call for the principal staples has probably been the cause of the lack of development of the fine art of salesmanship which is so prominent and effective a part in the business organism of other lines of trade.

As a matter of fact, our salesmen are fully 98 out of 100 the merest of order takers. The very suggestion of undertaking a systematic development of a customer so as to induce him to buy more of the specialties which his house represents would throw the average builders' supply salesman into a fright. To take a customer in hand and review the specifications with him so as to lead him to consider all of the advantages in the material that he really represents, and to be prepared to give the full explanation of the uses, the advantages and the economy contained in each of the items is a thing that is very seldom attempted. Such a man has never been developed by very many of the concerns who are the leaders in the building material business.

For instance, your order taker, who ought to be your salesman, is in the habit of taking the rough estimate of the number of barrels of cement that the job will require, the number of loads of crushed rock that will be used in the footings and in the basement floors and the rough estimate of the number of thousand brick that will be used in the wall. He will jot down that 60 days hence they will reach the plaster specifications, at which time some other order taker will be sent to the job to see how many loads of sand will be required, how many tons of wall plaster and how many tons of lime. This you are forced to consider when giving attention to that job.

Now, as a matter of fact, it is really giving the job as little attention as possible, because, even though that order taker calls every day to ask what is needed, it will only amount to the checking off of the number of loads in that day's delivery.

Now, how would it be if a salesman tackled that job? He would with a mere glance take in the fact that the staples of cement and crushed rock and sand for concrete will be needed at once, and so

record it. He would look over the list of materials that he represents and with his trained eye decide whether there was a place in this job for the use of some of them. As soon as he decides that the layout of the building would suggest the use of corrugated wall ties, he would immediately advocate the sale of such quantity as his judgment would tell him the job could use with good results. This is an insignificant item, but one which the average customer would overlook and would be grateful to the salesman for calling it to his attention. For at the time that the corrugated ties are needed, the masons will call for them and an expensive delay in getting this insignificant item will make one of those little losses that count up by the time the job is finished. The salesman has added an order to his notebook that this customer is gratified and the volume of specialty business has been increased. He will observe the bathroom finish and recommend "Keene's cement for the plastered interior, and he will take the plans and study them carefully to see if there are moldings or other members of relief finish that can be added to the plastering detail. He will check over the job and make sure that there is no possibility of that customer failing to secure from his house each and every article that they carry, from the footing to the chimney caps, from the front steps to the back door.

More than that, a true salesman would never consider that he had secured all three is in a job until he had discussed the situation fully with his customer, made the acquaintance of the owner and reviewed the matter with him so as to co-operate with the contractor or builder of the job to get the details re-arranged so as to increase the amount of his own orders on the building and at the same time assist his customer to get the job a little more in line with his own ideas of profit of speed in reaching the final pay day.

It is easy to calculate that a salesman so equipped and so working in co-operation with his customers will be able to increase the sales of each and every job that his house handles through his efforts and at the same time materially assist his customers by putting the owner into the most favorable attitude of mind by the intelligent and well-timed suggestion that such a salesman can always make with regard to the materials of construction in which he is not only supposed to be, but in every case should be, an acknowledged expert.

### DISCOVERS NEED OF STUDYING TRAFFIC REGULATIONS.

(Continued from page 19.)

"Well, here you are," and a \$5 bill was passed to the man with the gun. "I am sorry to have spoiled your hunting," added the motorist.

"I wasn't going hunting," replied the man as he pocketed the bill.

"Not going hunting?" was the surprised remark. "Then where were you going with the dog and gun?"

"Down to the woods to shoot the dog," was the reply as the native swung himself over the fence.

"Now, I have paid for a good many such dogs, both to the railroads and to other people, and this little line of study on tariffs and classifications is to prevent it in the future," concluded the Philosopher.

"I used to envy you because you didn't have to worry over dry weather and army worms and the like," said Farmer Jones, "but I guess you have your own troubles."

### A Word for the Local Dealer.

Every once in a while, the question of the "local dealer" arises, as brick manufacturers—particularly face brick makers—meet and discuss selling problems. In this case, the "local dealer" means the man who sells lumber, lime, lath and cement, flue lining, drain tile, seeds and, where he can, face brick.

It is claimed that, on account of the multiplicity of his interests, he cannot be a good brick man, since he will sell anything that his customer asks for, and "push" only that thing which pays him a large profit.

In other words, he is a regular business man.

Some of the larger face brick dealers take the stand that face brick is a commodity that needs a broad training in architectural lines, a wide acquaintanceship with raw materials, a technical knowledge of clay and the application of high heats to that grateful material, and, not least, a discriminating taste in the composition and color of mortar.

The "brickwork expert" is, naturally, found in the larger cities, where his specializing finds a rich field. Brick prices are higher, bricklayers' wages are higher, contractors' margins are higher, and the architects' fees much nearer to the percentage prescribed by the American Institute of Architects.

The larger dealer in face brick proposes to send this expert into the country town, and could do so, were it not for the fact, so it is said, that the "local dealer" figures himself into the deal, and looks for a profit on the sale, even though it is put through by the expert.

In other words, he is a regular business man.

The larger dealer talks "keep up the prices"—yet does not see how he can include a commission for the "local dealer." The "local dealer" parcels out small lots of face brick at prices that are about 50 per cent higher than the larger dealer ever thought of charging. He would continue to sell at a high profit, and "keep the price of brick up" were it not for the large dealers coming in, or, worse than that, the manufacturer himself quoting direct on every bit of desirable work in the "local dealers' town. So the "local dealer" loses interest in brick, and "pushes" something else.

In other words, he is a regular business man.

—Brick and Clay Record.

### NEW INCORPORATIONS AND VENTURES.

The American Building Product Co., Augusta, Me., has been incorporated with a capital stock of \$10,000. The incorporators are Ernest L. McLean, Frank E. Southard, E. A. Cushman, Augusta, Me.; Sanford L. Fogg and Pauline Lowell, Hallowell, Me. The new firm will manufacture and deal in building materials.

The firm of Jansen & Zoeller, of Pekin, Ill., has been incorporated with a capital stock of \$30,000. The incorporators are J. D. Jansen, D. H. Jansen and Charles Zoeller. The new concern will manufacture building materials.

O. M. Phillips Lumber & Supply Co., Charleston, W. Va.; capital \$10,000; Oscar K. Phillips and others.

**The connecting link between factory and delivery of goods to the consumer is the salesman and the trade paper. When they jointly get behind anything and intelligently and persistently push it, it's a success. The prosperity of the salesman and the trade paper, then, depends on CO-OPERATION. "Barkis is willin'."**



## We can design Gravel Washing Plant to suit your own Requirements—

Every "S-A" Gravel Washing or Screening Plant is designed to meet special and peculiar conditions—it is designed *primarily* to pay on the investment. We study your market requirements, your probable future demands, your railroad facilities, as well as the character of your gravel, the location of the plant, etc. All these affect the financial success of the plant—and every one of our 250 plants has paid dividends on the investment.

Our Engineers are here at your service. Write

**Stephens - Adamson Mfg. Co.**

Conveying Engineers

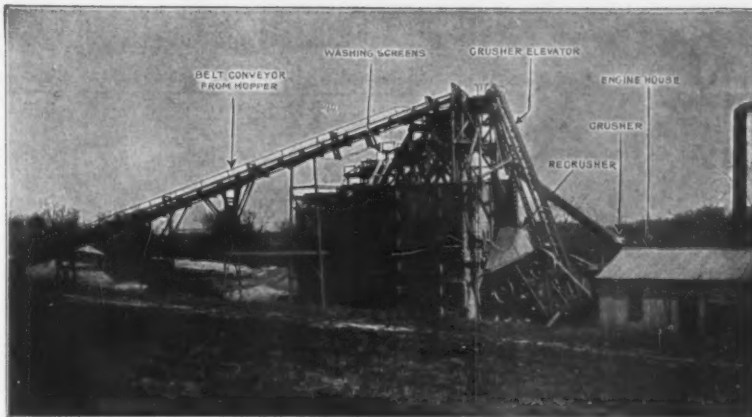
**AURORA, ILLINOIS**

NEW YORK  
BOSTON

CHICAGO  
LOS ANGELES

PITTSBURGH  
SALT LAKE CITY

ST. LOUIS  
TORONTO



The plant, shown above, was designed and built for a market capacity of four cars per day with an allowance for future increases. In one year, the plant had to be increased to handle ten cars daily and all extensions were paid for out of the season's profits. A steam shovel excavates the gravel and delivers into standard gauge cars hauled by a dinky locomotive. The cars dump into a track hopper from which the gravel is carried on the 24-inch by 175-foot inclined belt conveyor to the screens. The product is washed absolutely clean in "S-A" Gilbert Screens and is in great demand.

We design and equip Rock Crushing Plants, Sand and Gravel Washing Plants, Screening Plants, Storage Systems.

We manufacture Conveyors, Elevators, Transmission Equipment, Gates, Feeders, Car Puliers, etc.

## The Lawson Automatic Tramway

exemplifies the last word in the

### SCIENCE OF SHORT-HAUL

It does everything better than any other tramway; many things which it does can be done by no other tramway.

It is semi-automatic in loading.

It is fully automatic in discharging.

It is operated by one man at the loader only.

It discharges its load at regular intervals and in uniform amounts.

By an ingenious device the car in dumping clears itself of every kind of material, however soft or sticky.

If required, it transports in either direction, loading and dumping at either end of the route.

UNLIKE EVERY OTHER TRAMWAY, ITS CABLE WEAR AND OTHER MAINTENANCE IS ALMOST NOMINAL: this statement is hard to believe, but is, nevertheless, a fact.

Its capacity is anything from 10 to 100 tons per hour.

It handles clay, sand, ore, coal, culm or slack, crushed stone, gravel, cross-ties, tan bark, logs, lumber, staves, merchandise, boxes, cotton bales, sugar cane, or any other material—including people.

It takes a minimum of power to operate it.

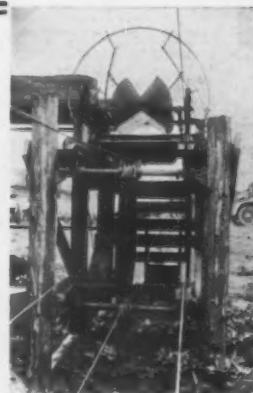
It has handled ore for a year, including loading, transporting and dumping, for an average of 3c per ton taken from the books.

Being portable and in small units, it can be removed, changed in length, relocated and rebuilt as often as desired—hence a contractor makes it a part of his plant.

Notwithstanding all this, IT IS THE LOWEST IN FIRST COST OF ANY TRAMWAY ON THE MARKET.

Send for our various Bulletins, which are fully illustrated. After reading them tell us your problem. As Short-Haul Engineers, we will then recommend the proper lay-out and tell you what it will cost to install and to operate.

THE DUMPING TERMINAL



AUTOMATIC LOADING TERMINAL

**Consolidated Tramway Company**

61 Broadway, New York

Shops at Roanoke, Va.

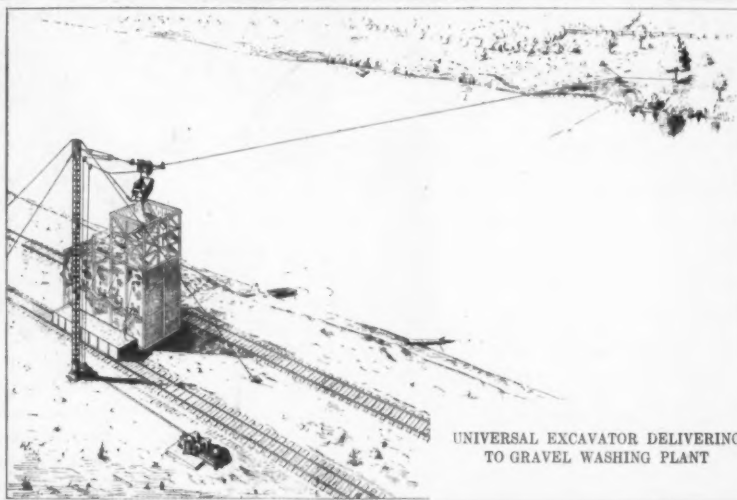
Tell 'em you saw it in ROCK PRODUCTS AND BUILDING MATERIALS



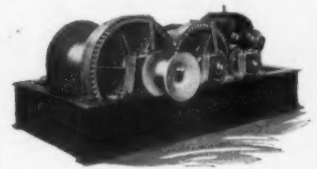
## UNIVERSAL CABLEWAY EXCAVATORS



Our Excavator Buckets are designed to dig with minimum power. Wearing parts are all readily renewable. Patent toggle and tipping chain to load insure positive, easy digging action.



UNIVERSAL EXCAVATOR DELIVERING TO GRAVEL WASHING PLANT



Steel Frame Electric Hoist with cut cast steel gears throughout designed especially for excavator duty. The strongest, fastest, most durable electric hoist built.

**J. C. BUCKBEE COMPANY, ENGINEERS, CHICAGO**

### INDIANAPOLIS CABLE EXCAVATOR CO.

Beauty Avenue and New York Street Indianapolis, Indiana

### NEGLEY PATENTED EXCAVATORS

LELAND EQUIPMENT COMPANY

126-128 Pine Street San Francisco, Calif.  
Agents for Arizona, California and Nevada

CHAS. T. TOPPING MACHINERY COMPANY

Agents for Western Penna. and W. Va. Bessemer Bldg., Pittsburgh, Penna.

Write us for prices on "BEAR CREEK" brand White Lime and "WHITE BEAR" Hydrated Lime. Prompt Shipment.

**HANNIBAL LIME CO.** HANNIBAL MO.



## PLYMOUTH CLAY PRODUCTS CO.

FORT DODGE, IOWA

## The Evans Clay Mfg. Co.

UHRICHSVILLE, OHIO

Standard Sewer Pipe  
Double Strength Pipe Wall Coping  
Chimney Tops Building Blocks  
Flue Linings Stove Pipe  
Thimbles Fire Brick  
Drain Tile

AND OTHER FIRECLAY PRODUCTS

TWO BIG PLANTS ∴ 4,500 CARS ANNUAL CAPACITY

## BRICK—The Old Way of Handling Them is a Nuisance

In tossing brick out of a car many are broken. A wheelbarrow doesn't carry enough bricks to warrant the time it takes to load, wheel it out and dump it.



### Use a CLEVELAND BRICK CLAMP

*It is the Newest and Quickest Way*

Furthermore, in unloading brick it actually saves ONE-THIRD of the time over the old methods. This clamp is adjustable and will carry from FOUR to TWELVE bricks. There's no fuss or bother. Simply place the clamp down on the bricks and lift the handle.

The price? It is so inexpensive ANYONE can afford it. Just send your name on a postal and we'll send a neat catalog and price list.

**THE P. D. CRANE COMPANY, 10201 Harvard Avenue, Cleveland, Ohio**

# Dealers— Attention!

We are mobilizing for the 1915 Campaign. The principal cities are now strongly fortified, and every mail brings orders for more Ceresit ammunition.

Our organization is perfected, our plan of campaign completed. The time to enlist is now. If you have not joined the Ceresit battalion get in the line of advance and

## Fall In!

### Ceresit Waterproofing Co.

924 Westminster Bldg., Chicago



#### FACTORIES:

Chicago; Unna, Germany;  
London; Paris; Vienna  
Warsaw



# BOOKS FOR THE TRADE

#### Cement Users

- Portland Cement for Users  
Henry Falja and D. B. Butler. Price \$1.20 C
- Cementa, Mortars and Concrete  
Myron C. Falk. Price \$2.50 C
- Reinforced Concrete  
W. H. Gilson and W. L. Webb. Price \$1.00 C
- Hand Book of Cost, Data  
Hallbert P. Gillette. Price \$5.00. C
- Concrete Construction  
H. P. Gillette and C. S. Hill. Price \$5.00 C
- Cement Workers' and Plasterers' Ready Reference  
H. G. Richey. Price \$1.50. C
- Reinforced Concrete  
A. W. Buel and C. S. Hill. Price \$5.00 C
- Concrete  
Edward Godfrey. Price \$2.50. C
- Reinforced Concrete  
C. F. Marsh and Wm. Dunn. Price \$7.00. C
- Practical Treatise on Foundations  
W. Patton. Price \$5.00. C
- Concrete  
Thomas Potter. Price \$3.00. C
- Cement and Concrete  
Louis C. Salin. Price \$5.00. C
- Concrete and Reinforced Concrete Construction  
Homer A. Rehl. Price \$5.00. C
- Handbook on Reinforced Concrete  
F. D. Warren. Price \$2.50. C
- Popular Handbook for Cement and Concrete Users  
Myron H. Lewis & A. H. Chandler. Price \$2.50. C
- A Manual of Cement Testing  
Richards & North. Price \$1.50. V
- A Treatise on Cement Specifications  
Jerome Cochran. Price \$1.00. V
- Manual of Reinforced Concrete and Concrete Block Construction  
Chas. F. Marsh and Wm. Dunn. Price \$2.50. V

#### Cement and Lime Manufacturers

- Bungalows Camps and Mountain Houses  
Price \$2.00. C
- Limes, Cements and Mortars, Concretes, Mastics, etc.  
G. R. Burnell. Price \$0.60. C
- Instructions to Inspectors on Reinforced Concrete Construction  
Geo. P. Carver. Price \$0.50. C
- Cements, Limes and Plasters  
Edwin C. Eckel. Price \$0.00. C
- Practical Treatise on Limes, Hydraulic Cements and Mortars  
Gen. Q. A. Gillmore. Price \$4.00. C
- Mortars, Plasters, Stuccos, Concretes, Portland Cements and Compositions  
F. Hodgson. Price \$1.50. C
- Concrete Factories  
Robert W. Lanley. Price \$1.00. C
- Portland Cement; Composition  
Richard K. Meade. Price \$4.50. C
- Manufacture of Concrete Blocks  
Wm. M. Torrence and others. Price \$1.50. C
- Practical Cement Testing  
W. Purves Taylor. Price \$3.00. C
- Foundation and Concrete Works  
E. Dobson. Price \$0.60. C
- Reinforced Concrete. Mechanic and Elementary Design  
John P. Brooks. Price \$2.00. C
- Concrete and Stucco Houses  
O. C. Hering. Price \$2.00. C
- Concrete Costs  
Taylor-Thompson. Price \$5.00. C

#### Architects and Engineers

- Building Construction and Superintendence—Masonry Work  
F. B. Kildner. Price \$6.00. C
- Theory of Steel-Concrete Arches and Vaulted Structures. Wm. Cain. Price \$0.50. C
- Concrete Country Residences. Price \$1.00. C
- Graphical Handbook for Reinforced Concrete Design  
John Hawkesworth. C. E. Price \$2.50. C
- Theory and Design of Reinforced Concrete Arches  
Arvid Reuterdahl. Price \$2.00. C
- Treatise on Concrete, Plain and Reinforced. F. W. Taylor and S. E. Thompson. Price \$5.00. C
- Concrete Steel. W. N. Twelvetrees. Price \$1.00. C
- General Specifications for Concrete Work as Applied to Building Construction  
Wilbur J. Watson. Price \$0.50. C
- Rocks, Minerals and Stocks  
F. H. Smith. Price \$1.50. C
- Strength of Materials  
Edward H. Maurer. Price \$1.00. C
- Highway Construction. Austin T. Byrne and Alfred E. Phillips. Price \$1.00. C
- Refrigeration. Chas. Dickerman and Francis H. Boyer. Price \$1.00. C
- Plumbing. Wm. Reall, Gray and Chas. B. Ball. Price \$1.50. C
- Estimating. Edward Nichols. Price \$1.00. C
- Building Superintendence  
Edward Nichols. Price \$1.50. C
- Hollow Tile House. Squires. Price \$2.50. C
- Rock Excavating and Blasting  
J. J. Cosgrove. Price \$2.50. J J C
- Estimating and Contracting  
W. A. Radford. Price \$2.00.
- Brick Houses  
W. A. Radford. Price \$1.00.
- Cement Houses  
W. A. Radford. Price \$1.00.
- Cement and How to Use It  
W. A. Radford. Price \$1.00.

**ROCK PRODUCTS AND BUILDING MATERIALS 537 S. DEARBORN STREET CHICAGO**

Tell 'em you saw it in ROCK PRODUCTS AND BUILDING MATERIALS



The market place of the building material industry. Employment department, machinery wanted and for sale, etc. If your wants are not answered in this page, write a letter to this office.

**THE FRANCIS PUBLISHING CO.**  
537 S. Dearborn Street Chicago, Illinois

# :: THE :: BOURSE

Advertisements will be inserted in this section at the following rates:

For one insertion.....25 cents a line  
For two insertions.....45 cents a line  
For three insertions.....65 cents a line

Eight words of ordinary length make one line.  
Heading counts as two lines.  
No display except the headings can be admitted.

Remittances should accompany the order. No extra charges for copy of paper containing the advertisement.

## EMPLOYMENT WANTED

**WANTED**—Position as General Manager or Salesman by man experienced in the rock crusher business and in road contracting; also, in the sale and delivery of cement and lime. Twenty years' experience, highest reference for ability and character. Only engagement with a high-grade concern will be considered. Address Box 1009, care ROCK PRODUCTS AND BUILDING MATERIALS.

**WANTED**—Position as quarry superintendent. Twenty years' experience erecting and operating crushing plants. Reference. Address BOX 1011, care ROCK PRODUCTS AND BUILDING MATERIALS.

## EMPLOYEES WANTED

### WANTED

Bookkeeper capable of looking after one or two assistants. Preference given one having knowledge of building material and coal. Location Indianapolis. Will invite answers from parties having experience in position of auditor or credit man, or supervisor of bookkeepers. Old firm, handling both lines. Address BOX 1010, care ROCK PRODUCTS AND BUILDING MATERIALS.

**WANTED**—A competent Trap-Rock superintendent. One who is capable of opening up and operating a first-class quarry plant, and who is very thoroughly familiar with blasting, etc. Must have had several years' experience. For particulars address, giving references, amount of salary expected, P. O. Box 805, Hartford, Conn.

## CARS & LOCOMOTIVES FOR SALE

### CARS.

150—5 yard 36-inch gauge all steel Peteler 2-way dump cars, built 1910 and '11. Thoroughly overhauled. Practically good as new. The best dump cars we have ever seen. We are putting these cars on the market at bargain prices. Write us for further information.

Eight 36-inch gauge double-truck flat cars.

### LOCOMOTIVES.

Eleven—12x16 Porter four-wheel saddle-tank 36-inch gauge locomotives, built 1910 and '11, and used until the end of the season 1911; practically new.

One—11x16 Pittsburg four-wheel saddle tank, 36-inch gauge.

Thirty-five 9x14 Porter four-wheel saddle tanks, 36-inch gauge. Most of these have steel cabs and were built since 1902.

### STEAM SHOVELS.

Three—Marion Model 60 steam shovels, in excellent condition; ready for immediate shipment.

One—Bucyrus Model 65, with Model 70 front and applied. Thoroughly overhauled.

Two—Marion Model G shovels, in first-class condition. Also big lot steam shovel repair parts, and other contractors' equipment.

MINNESOTA EQUIPMENT CO., Hibbing, Minn.

## BUSINESS OPPORTUNITIES

### AGRICULTURAL LIME AND CRUSHED STONE QUARRY FOR SALE.

A well-developed lime and crushed stone quarry in Eastern Tennessee, situated on the Southern Railway, of approximately 43 acres, is now offered for sale at a very attractive price on reasonable terms. A big market exists in the territory for agricultural lime. Modern road building is now going rapidly forward, which will make a good outlet for that product. Full information and details obtained by referring to file 47833 and writing M. V. Richards, Land and Industrial Agent, Room 371 Southern Railway, Washington, D. C.

### BUILDERS' SUPPLY AND GRAIN BUSINESS FOR SALE.

Attractive proposition in active city of New York State will be sacrificed to hustler. Present owner retiring from business. Address Box 1008, care ROCK PRODUCTS AND BUILDING MATERIALS.

**WANTED**—Chicago Agency for building materials. Capable, aggressive young man wants to represent manufacturer who has a good line. Address "Chicago," care ROCK PRODUCTS AND BUILDING MATERIALS.

## Diamond Labor Agency

35 South Canal Street  
Chicago, Ill.

Office Phone Franklin 3529  
Residence Phone Garfield 5048

### FREE

We supply direct on receipt of trial order, male help, all nationalities, in any number, for skilled or common labor work; men to board themselves or with employers. Bridge, Concrete Form Carpenters and Helpers, Machinists, Engineers, Firemen, Coal Passers, Etc.

**WE DO NOT MISREPRESENT**, but always describe to our applicants the nature of work, working conditions and wages exactly as stated by employers giving us their orders—hence no dissatisfaction between any parties at interest.

We get the best class of experienced Woodsmen, Trackmen, Quarrymen, Steam Shovel Skinners, Farm Hands, Coal Miners, Factory Help, Shops, Yards, Railroad and Contract Laborers.

**We do not charge employers for men or services, they are both FREE.**

## PLANTS FOR SALE

**FOR SALE**—Profitable lime manufacturing plant with inexhaustible quarry. Capacity 200 barrels per day. Have contract for 300,000 barrels. Have 6c rate to New York, 7c to Boston. Owners have other business. Address Box 372, care ROCK PRODUCTS AND BUILDING MATERIALS.

## 1½ YD. TRACTION SHOVEL

Vulcan "Little Giant" with three sets of engines.

Dipper has manganese teeth.

**Excellent Condition**

**WICKES BROTHERS, JERSEY CITY, N. J.**

## RAILS

all sizes—small or large lots. New and relaying. We are familiar with quarry requirements and know just what you need. Frogs, switches, splices and all track accessories. Immediate shipment from stock.

**L. B. FOSTER CO.**

PARK BUILDING

PITTSBURGH, PA.

### HIGH GRADE

### SILICA

## CLAY AND SAND

CRUDE-DRIED-GROUND

CRUDE-DRIED-SCREENED

**GEO. C. CROSSLEY**

CROSSLEY STATION

TOMS RIVER, N. J.

Paper Bags  
of  
Quality.

For All Purposes

The Jaite Company

Boston, Ohio

Strongest, Most Flexible

## IMPORTANT!

We ask the cooperation of our advertising patrons in the matter of getting changes of copy for their ad into this office at an early date.  
Advertising copy for issue of the 7th should be mailed us not later than the 25th of the month preceding. Changes of copy for the 22nd issue should be mailed not later than the 10th of each month.  
In complying with this request you will permit of ample time in which to have your ad set and receive proof for O. K., or corrections.

**The Francis Publishing Company - 537 So. Dearborn St., Chicago, Ill.**

Tell 'em you saw it in ROCK PRODUCTS AND BUILDING MATERIALS



# NEWS of the TRADE

## General Conditions.

Dun's Review, published weekly by R. G. Dun & Co., states:

Trade sustains a steady position. The difficulties in international dealings slowly undergo readjustment, but the prospects furnish encouragement. Banking affairs are reflected by a slight rise in clearings and heavy currency shipments to the interior, with discount transactions mainly nominal and little pressure for accommodation despite the important September settlements. The failure record, however, indicates increased defaults among storekeepers and small manufacturing concerns.

Aside from progress in constructive measures to meet present obstacles in both domestic and foreign business, the week's developments include no special changes as to production and distribution in this district. The general tone rings clearer as to the immediate future, and, although strengthening factors emerge slowly, confidence in improving demands is more widely expressed.

Adverse effects of the war mainly are responsible for lower bank clearings in August and continued curtailment of financial accommodation. The foreign exchange situation has turned less embarrassing and prospective opening of American banks opens up facilities for extending trade relations in South America. That inviting field now is desirous to obtain goods more largely than heretofore from this country, inquiries the last week for Chicago products being 20 per cent more than the week before.

Among the local activities it is notable that the iron and steel producers increase outputs over those of a month ago. Some increase is also seen in capacity and hands employed at Gary and Pullman.

## Chicago Condition Slowly Improves.

**With Building Prospects Better, Retailers Hope for Restoration of Business.**

People who are in a position to judge say that the prospects for building are very much better than they were a few weeks ago. Business is recovering very rapidly from the first effects of the announcement of the war, and if only a part of the good things promised materialize this country will enjoy a period of prosperity the like of which has never before been known. There is distinct improvement in the steel industry, with indications of further advances and as this is one of the truest means of judging business conditions it will be seen that there is a good reason for looking forward to better conditions. Building material dealers differ as to present conditions, some are very optimistic while a few are complaining of the situation.

George W. Dee, of Wm. E. Dee Co., 30 N. La Salle street, states, "We are holding up fine and collections are good for this time of the year. We anticipate taking up several large contracts later on this fall, when some of the larger buildings are under way."

R. E. Wilcox, of Wilcox Co., 3690 Milwaukee avenue, says "We have plenty of business and find that it keeps us busy supplying contractors with concrete materials, such as cement, sand, gravel and crushed stone. Country business is also in fine condition."

Hydraulic-Pressed Brick Co., 133 West Washington street, claim that the war situation seems to

have put a damper on business. Nevertheless, they are quite optimistic and look for favorable business conditions within the next few months.

E. K. Cormack of the Wisconsin Lime & Cement Co., 604 Chamber of Commerce building, states, "Conditions seem to be as flat as dish water; little orders are coming into the office quite frequently, but large contracts are rather scarce. The teams, however, are being kept busy handling lime, cement and plaster and conditions are expected to pick up shortly."

The McLaughlin Building Material Co., Inc., 29 South La Salle street, replied, "On work under way materials are being delivered in a very satisfactory condition. Money is a little tight and for that reason new jobs are not quite as plentiful as we had hoped. Notwithstanding the present war conditions, indications point to a vast improvement during the late fall months."

Mr. Leavy of the Illinois Building & Supply Co., 2753 South Kedzie avenue, says, "Business is fair and I learn today from the banks that loans are much easier to obtain. Therefore, I look for better prospects and a healthy fall business. There are a goodly number of small buildings under way and conditions in this line appear far better than they did one week ago. Of course the European situation seems to slow us up a little; but I believe the slack condition will soon wear off and the building supply trade regain its former stride, not to be headed off in a hurry. Collections, while not up to expectations, are just as good as could reasonably be expected when such a tightness seems to prevail."

F. W. Lucke, of F. W. Lucke & Co., 133 West Washington street, talking for six live paving brick concerns, declared "In Chicago and vicinity the demand for paving brick is increasing on account of the continual pulling together of the brick men during the past two years. Their work and efforts seems to have borne fruit and they all feel very optimistic and see a good season ahead for their line. In all the concerns I represent optimism seems to prevail."

"There has been quite a healthy demand for paving brick in Illinois, Indiana, Michigan and Wisconsin and everybody apparently will be busy shipping brick until snow flies. The numerous applications for good roads in the four above-mentioned states will certainly increase the demand for paving brick for next year."

## CAMPBELL-SHULTZ CO. OPENS OFFICE.

The Campbell-Shultz Co., Passaic, N. J., has established its office and yards at 404 Main avenue, at the Erie railroad crossing. This is a very desirable location for a builders' supply concern. They will be wholesale distributors and retailers of builders' supplies, comprising all such materials as are required by mason builders, street paving and sewer contractors. The officers of the company are John M. Campbell, president; Walter C. Shultz, vice-president, and Clifford G. Shultz, secretary and treasurer. All of these gentlemen have been prominent for years in the metropolitan district in the builders' supply business and are well known to the trade. Passaic has been selected for the home of this new concern because it is right in the center of a big and prosperous district. It has had a wonderful fast growth and for that reason has been a good town for the builders' supply

business. The concern will be the distributor of the Kreischer brick plant, which produces one of the best-known standard building brick in the great metropolitan district, having been manufacturing at the same plant on Staten Island since 1845.

## LOUISVILLE DEALERS KEPT BUSY.

Louisville, Ky., Sept. 5.—Business with the supply houses of Louisville has been fairly active for the past 10 days, but the bulk of the summer business appears to have been placed. The sales of specialties continue good, and lime and cement are in fair demand. Face brick are not moving as rapidly as they did 30 days ago. Collections for the most part are coming in slowly; a majority of the supply men are kicking on this score. Future developments in the market are rather hard to figure on at this time largely because of the European situation, which is making the country conservative and money tight. The supply men are feeling optimistic, however, over the outlook for fall business, and are not worrying greatly about general conditions.

The Builders' Exchange, of Louisville, is busy making preparations for a big outing to be held at Hike's Point, Ky., in a few days. One dollar will be charged everyone attending the picnic, and business cares and worries will be forgotten for one day. A chicken dinner and free refreshments are expected to draw a good crowd to the old-fashioned country picnic. A baseball game will be one of the main features of the day and volunteers have been called for from the building supply men, contractors and other members of the exchange to participate in the fun. J. B. Speed & Co. will award a prize of \$10 in gold to the person guessing the nearest to the number of sacks of "Speed" Portland cement shipped from the mill during 1913. Similar contests have been arranged by the Peaslee-Gaulbert Co., the H. C. Tafel Electric Co., Albrecht Sons Hardware Co., Dehler Brothers and others. The contest of the Albrecht Sons Hardware Co. will consist of driving 25 nails cleanly in the shortest space of time. A sawing contest will be another feature of the day.

Warren Brothers report that business is slightly quiet at present in some lines, but a large quantity of steel sash have been sold for use in the new school buildings now under course of construction in the city. Concrete machinery and equipment has only been in fair demand. Guy Warren has just returned from a two days' trip to Lagrange, Ky.

L. M. Rice, president of the Central Paint & Roofing Co., reports that business at this time is exactly as the company would have it. About a car of roofings a day is being handled, a goodly portion on large contracts. Country business has been extremely gratifying.

Isaac H. Tyler, president of the Tyler Building Supply Co., has a number of good contracts for brick and other materials on the fence and expects to close some of them shortly. Specialties are moving nicely at this time. He recently took on the line of the Asbestos Protected Metal Co., of Beaver Falls, Pa. Mr. Tyler's yearly attack of hay fever has descended upon him and at present he is miserable.

The Union Cement & Lime Co. issued the first of a series of monthly bulletins on Sept. 1. The bulletin is in the nature of a four-page folder and

treats of the various supplies handled by the company and lists the prices of a number of them. At the head of the bulletin is a characteristic remark of Leo M. Parsons, sales manager of the company, as follows: "If you do not blow your own bazoo, the same shall not be blowed." The bulletin will be mailed to all contractors, architects and others interested in the business. The idea is new and novel in this city, but is apparently taking well.

A number of small orders are still coming into the office of the Louisville Builders' Supply Co., but large contracts are rather scarce just now. The teams, however, are all being kept busy handling lime, cement, plaster and sewer pipe. The brick line is slightly off, but is expected to pick up shortly. Most of the residences now being constructed are small and only use limited quantities of material. Collections are abnormally slow, but this condition appears to be general this fall. A. E. Bradshaw, president of the company, and also head of the Indianapolis Mortar & Fuel Co., of Indianapolis, Ind., was in Louisville last week.

H. H. Frazier, sales manager of the R. B. Tyler Co., is still landing a big share of the good brick contracts around Louisville. During the past week he obtained a contract to deliver 200,000 Bloomfield "Bytex" brick, manufactured by the Bloomfield Brick Co., of Bloomfield, Ind., for a new public school building at Forty-first street and Garland avenue. Another contract was awarded him for a new school building at Twenty-fifth and A streets. This job will take 180,000 Belden "Canton Rough-text" brick, manufactured by the Belden Brick Co., of Canton, O., and 35,000 light grey, shade 11 Kittannings, manufactured by the Kittanning Brick & Fire Clay Co., of Kittanning, Pa., will be furnished for the interior of the gymnasium and basement at a new school house to be erected on Seventeenth and Duncan streets.

#### MEMPHIS EXHIBITS ATTRACTIVE.

Memphis, Tenn., Sept. 4.—During the Cotton States Merchants' Association's meeting, just held in Memphis, bringing to the city 2,500 prominent country merchants and trades people of the central South states for an initial gathering, no exhibit was more appreciated by the visitors than that of the Builders' Material Club, open on Madison street. The correspondent of ROCK PRODUCTS AND BUILDING MATERIALS was invited by some of the trades people to look it over. E. C. Kennedy, secretary of the club, and a most competent man, is in charge there. The location is 205 Madison avenue on the Great White Way. "Made in Memphis" slogans appear in many places. Some weeks ago the club leased a two-story building and began to equip it. It is both artistic and finished. Every exhibitor has been allotted the same space, 7½ by 10 feet. W. W. Fischer, president of the club and head of the Fischer Lime and Cement Co., states that a little later the general public will be given a reception there. The last firm mentioned has a display of Beaver board, part of which is for a painting 8 by 10 feet, the scene done in oil by a French artist to demonstrate that such work can be finished on wall board.

There is a complete exhibit of concrete work, too. The John A. Denie Sons Co. is displaying lime and cement decorations for yards, porch work, asphalt shingles and concrete in different forms.

The Tri-State Builders' Supply Co. has exhibits of fine woodwork, polished and otherwise, showing flooring and all sorts of wood material and finishing and cement specialties.

The Memphis Brick Supply Co. is showing material of many styles, mantels, panels of brick and wistaria decorations.

The officers of the club are W. W. Fischer, president; P. A. Gates, vice president; L. J. Moss, treasurer; E. C. Kennedy, secretary.

#### CONDITIONS IN PHILADELPHIA.

Philadelphia, Pa., Sept. 4.—Although the August report of the Bureau of Building Inspection shows a marked decrease of work undertaken as compared with that of the previous month and also for the corresponding month of last year, this year's total to date shows an increase of about \$400,000 in the estimated cost of the work over the corresponding period in 1913.

The figures for August show 842 permits granted for 1,254 operations, at an estimated cost of \$2,604,240. In the corresponding month of last year there were 1,127 operations at a cost of \$3,616,860, and in July, 1914, there were 954 permits for 1,556 operations, costing \$4,661,850. In the year to date there were 6,837 permits granted for 11,455 operations, costing \$28,604,090, as compared with 7,135 permits for 10,207 operations, costing \$28,212,045, in the corresponding period of last year.

"Things are not by any means rushing with us, but we can't complain," was the characteristic business diagnosis of Alfred Bates, manager of the Union Building Co., of this city.

J. T. Allen, 212 South Tenth street, when interviewed, said, "The material that we are now selling is mostly for small buildings and repair work. Work on big jobs is now being finished up, and if our anticipations for the fall business materializes we will have a record breaking year."

New Orleans dealers are busy supplying contractors with materials for the construction of "rat-proof material," according to John J. Voelkel, president and treasurer of the J. J. Clarke Co., Ltd., who says: "Business has been very good the past few months, and we have had one of those 'ill winds that blow some one good' happen in the form of a few cases of bubonic plague here. The U. S. government has the situation in hand and the amount of rat proofing that is going on in the shape of concrete walls and floors are almost unimaginable. We can hardly keep customers supplied with sand, gravel and cement."

## Traffic News

#### RULING TO PROHIBIT PAPER LIME BAG.

Lime manufacturers are thoroughly aroused over the efforts of the Joint Rate Inspection Bureau to enforce the ruling which was slipped in by both the Official Classification Committee and the Southern Classification Committee in their last classification books, lately published, which prohibits the shipment of lime of any kind in paper sacks. This ruling is especially pernicious to manufacturers of hydrated lime and active steps are being taken by the National Lime Manufacturers' Association, headed by President William E. Carson, calling upon lime burners of the Eastern and Southern districts to take the matter up with the railroads of their sections, and exert every influence at their command to have the ruling withdrawn.

The tariffs which have caused this trouble and which have just become effective are in Official Classification Book No. 42, page 20, Rule 8-A, Sec. 13; and Southern Classification Book No. 40, page 5, Sec. 13. The location of the Official Classification Committee is 143 Liberty street, New York City, and the Southern Classification Committee is at 816 Grant building, Atlanta, Ga.

Hydrate manufacturers that are out of the Eastern and Southern districts are urged to investigate as to whether the classification committees in their districts have it in mind to follow the classification of the Southern and Eastern committees.

#### Miracle Celebrates Birthday Anniversary.

Mr. O. U. Miracle, president of the Two Miracle Concrete Co., celebrated the anniversary of his birth at Glacier hotel, Lake McDonald, Glacier National Park, Aug. 22 and 23. To make the occasion an enjoyable one Mr. Miracle invited a few of his large number of friends, among whom was a party from Spokane consisting of Mr. Dan R. Brown, district manager Lehigh Portland Cement Co.; Mrs. D. R. Brown, Mr. F. T. Brown, traffic manager of the same company at Spokane; Mr. D. G. Black, general agent Great Northern Railway Co., Spokane; Mrs. J. H. Marks, Spokane, and her sister, Mrs. Edward Fischel, Natchez, Miss.; Mr. Fred E. Paulson, general traffic manager of the Lehigh Portland Cement Co., Allentown, Pa. This party left Spokane on Friday night, Aug. 21, for Belton in the private car of Vice-President Paine, of the S. & I. E. Railway Co. At Columbia Falls, Mont., they were joined by Mr. and Mrs. Charles L. Marsh, Mr. and Mrs. W. M. McDonald and Mr. M. H. Griffin, all of Kalispell.

When the train bearing the party arrived at Belton it was met by Mr. Miracle and Mr. George H. Detlor, secretary of the Two Miracle Concrete Co., and Mrs. Detlor. A waiting tally-ho carried the party from Belton to Lake McDonald, three miles away. From that point Mr. Miracle conveyed the party in a handsome launch to Glacier hotel, 10 miles distant. This launch remained at the disposal of the guests during their two-days' stay at the hotel.

Mrs. Miracle met the party as they arrived at the hotel and escorted them to their respective quarters. The guests found that, true to the record he has established for entertaining his friends, the hospitality of Mr. Miracle was up to standard. He had reserved the entire third floor of the hotel for them.

The hotel, which is built in a "U" shape, has a wide-open porch. On this porch is to be found all of the comfortable and interesting necessities which go to make a stay at the place most enjoyable.

The two days at the park were spent in a succession of dinners, banquets, dances, launch rides, and hikes over the interesting park trails.

Mr. Miracle successfully avoided every trick and deception practiced by his guests to find out his age and refused to enlighten anyone on the subject. He has promised to have another celebration next year and they are planning to secure revenge at that time.

A number of handsome gifts expressed the high regard in which Mr. Miracle is held.

#### LOUISVILLE ROOFING JOBS PLENTIFUL.

A good deal of job work is now being handled by the National Roofing & Supply Co., according to Ed Streicher, president of the company. A job was recently received to supply 600 squares of roofing at the new plant of the Globe Fertilizing Co., a branch of the Federal Chemical Co. Five jobs are now on hand to put roofings of asphalt shingles on private residences. This shingle is becoming more popular all the time. The rate of insurance on the asphalt shingle is about the same as that on the metal roofing and the National Board of Underwriters has samples in the Underwriters' laboratory undergoing tests, according to Mr. Streicher.

#### FRISCO FIRM HAS NEW OFFICES.

New offices and sample rooms have been opened by the United Materials Co., at 618 Mission street, San Francisco, Cal. Various kinds of brick turned out by California press brick manufacturers are shown in panels about the office.



# N. B. S. A.

## The Association Has a Promotion Bureau

Organizations composed of men engaged in various industries are being formed every day and in every community, and the movement has taken such an impetus that we are prompted to stop for a minute and ask ourselves the reason for all this, and just what are the results they are trying to accomplish.

In the first place, it is quite apparent that these organizations are not being brought together for the purpose of bringing any greater financial returns to its members by means of maintaining prices, because experience has taught us that such agreements, aside from being entirely contrary to the law of the land, have lacked the stability and been unproductive of the necessary enthusiasm which must be aroused within a group of men, if they are to be kept together for very long.

Knowing all this, the association of today is proceeding along different lines and having had the benefit of the previous experience is making rapid progress; but how is it being done? First of all, of course, the individuals who are to form the proposed organization must be brought together to talk it over, as it were, and to forget the differences which may exist between one another for the time being. This is probably one of the most difficult stages that we pass in our efforts to organize, but with the perseverance which must be evident it is easily overcome and within a short time the meetings become an established fact and are being regularly attended by all of the members.

They have by this time come to learn that their friend and competitor wasn't half as bad a fellow as he was pictured to be; and when this feeling disappears, it is immediately replaced by the desire to co-operate with him and make up for the time that has been so long wasted.

After this preliminary period has been overcome, every one present is imbued with that spirit to do something, and it is the opinion of a good many men well versed in association work that there are two things which will occupy the entire time of any such gathering and be most productive of good results, and they are: Attention to the credit end of the business and the promotion of the sale of goods.

As a rule, the average American citizen's spending qualities are measured by his income, and they increase or decrease according as the income goes, and the same is true of an organization of business men. In the building supply business, with a few exceptions in cities where credit bureaus have been established, is found perhaps the most lucrative field for anyone who wants to get something without

paying for it that can be mentioned. This is caused by the very nature of the business itself. Building operations are by no means regular and they vary according to the condition of the labor market; and in a good many instances according to the "weather" itself.

The laxity of credit regulations breeds the "skate" contractor. When this very same person meets with the reverses that are more or less bound to come, the building supply man who has furnished him his material, and by the same token, his "capital," is left to hold the bag.

In every city there are scores of contractors who are doing business on building supply men's capital; and the latter person by catering to such trade, is making it just that much harder for the first class man to get along, making his own business less prosperous.

There is, however, no need of repeating all this. It is well understood by everybody and can be very easily remedied by means of credit associations. There is no doubt of what can be done through this source, and after a bureau has been in successful operation for a short period the results begin to show on the bank balances of the members. Possibly their association has not enabled them to get better prices, but it certainly has helped them to collect the bills. Now with all this surplus, for surplus it is, because they have never been known to have it before, they aspire to do something which will help them sell more goods; and now we come to the "promotion" feature.

What can be done along these lines? The opportunities are unlimited, especially so when the thing which is absolutely necessary, namely, CASH, is ever present. By this means the association is in a position to advertise the products handled by its members in a way that has never been done before, and to secure for the products and the men who are handling them, publicity that was always lacking before.

The association is able to take part in everything that is to the general interest of the community which it serves. By so doing, it begets for itself and its members that invaluable asset of favorable public opinion. In other words, it keeps in absolute touch with everything that affects its interests and is in a position to handle each situation as it arises.

There are many other ways of increasing your sales in addition to using the non-failing method of advertising; they suggest themselves with the progress of the organization.

Finally, it might be said that publicity will work wonders in revolutionizing your business, and it is

believed that the way to secure it is to go after it yourself as outlined above. The results will be, first, prompt collections; second, publicity for your products and the promotion of your ideas concerning same. The combination of these two will, without doubt, enable you to secure the price that your goods are worth.

## N. B. S. A. Notes.

An article entitled "Prosperity and the Building Material Dealer," read before the last convention of the National Builders' Supply Association by Mr. Charles Weiler, of Milwaukee, Wis., and printed in the Feb. 22 issue of ROCK PRODUCTS AND BUILDING MATERIALS, has been put into pamphlet form and distributed by the association to its members. It has made such a hit that the association has now furnished 26,000 copies to the Lehigh Portland Cement Co. for distribution to its dealers. Anyone who has read this article or will read it, should not hesitate one moment about joining an association whose object is to eliminate the evils indicated and to accomplish the benefits that were secured.

Headquarters mail during the past few weeks from the members would indicate that business has been good, despite the many tendencies to the contrary now existing.

It is now only a matter of five months to the time when the Sixteenth Annual Convention will be called to order in Chicago. Preparations are already under way for a successful meeting. If any of the members have suggestions to make, they will be gladly accepted.

## Keeping At It.

A large percentage of business men of this country object strenuously to interesting themselves in the details of the business.

They keep their eyes posted on the receipts and expenditures and occasionally glance through the list of customers and others with whom they deal, but they neglect important features of their business.

There is no exception to this rule among builders' supply dealers. In this business, probably more than in any other, attention to detail is absolutely essential; for success in the retailing of builders' supplies comes through keeping overstocks down, keeping variety up, keeping the public informed, keeping the office, warehouse, yard and employees clean, in fact, keeping AT IT ALL THE TIME.

### NATIONAL BUILDERS' SUPPLY ASSOCIATION.

Chamber of Commerce Bldg.

Chicago, Ill.

#### Application for Membership.

The undersigned being heartily in accord with the "Constitution" and eligible to membership in the National Builders' Supply Association under requirements of Section I, Article 3 (ACTIVE), or in Section I, Article 4 (ASSOCIATE), does hereby apply for membership:

Firm name.....  
Signed by.....  
P. O. Address.....  
Date.....

#### Officers.

President—Edw. K. Cormack, Chicago.  
Treasurer—John J. Voelkel, New Orleans.  
Secretary—L. F. Desmond, Chicago.

#### Directors.

J. H. Allen, Lincoln, Neb.  
Charles Warner, Wilmington, Del.  
C. N. Ray, Detroit, Mich.  
W. F. Jahneke, New Orleans, La.  
C. M. Kelly, Providence, R. I.  
W. W. Coney, Cincinnati, O.  
L. W. Macatee, Houston, Texas.  
D. J. Kennedy, Pittsburgh, Pa.



# CONCRETE

## The Elkhart Power Plant

### Hydro-Electric Plant Arranged for Future Steam Plant Development.

A hydro-electric development comprising some unusual features was completed in June, 1913, on the St. Joseph river, in the city of Elkhart, Ind. This plant replaces an extensive system of old-time developments made possible by canal systems on both sides of the river, taking water from a stone-filled crib dam with about 12 feet head. This dam was located about a quarter of a mile above the junction of the Elkhart river with the St. Joseph river.

#### Unusual Features.

The new plant has a head of 18 feet, and the new dam is built immediately below the old one, the concrete work of the new dam being joined to the concrete apron which had been added to the old dam at a later date. The spillway consists entirely of Tainter gates, there being eleven gates 25 feet wide by 9 feet 6 inches high. Three of these are steam heated.

This plant is designed for the future building of a steam auxiliary of at least 7,500 k. w. initial installation, in immediate connection with present water power generator house. The whole plant has been laid out on the ground so that a steam railroad spur can be run parallel with the boiler house for future coal supply.

#### Arrangement of the Plant.

The plant is of the open flume type and there are three flumes or penstocks beside the exciter stall. The main flumes are 22 feet wide, and carry 16 feet of water above the floor. The total length of the penstocks is 81½ feet.

The plant as now built, comprising the penstocks, generator room, switch and transformer rooms, occupies a compact rectangle, 148½x120 feet. The exterior of the buildings is faced with an attractive vitrified brick laid in black mortar. The roof consists of 3-inch reinforced concrete slabs, 2½x5 feet in size, laid on steel purlins carried by steel trusses. These slabs are covered by green glazed tile.

The main powerhouse is served by a 30-ton hand crane, built by the Northern Engineering Works, Detroit, and the transformer room by a 10-ton hand crane.

There is a tailrace channel approximately 83 feet

wide and some 200 feet long leading straight away downstream from the turbines, and having smooth concrete sidewalls and for the most part a concrete bottom. This arrangement forms an ideal location for a Francis weir for the purpose of measuring the water discharged through the turbines.

The present concrete spillway consists of eleven steel Tainter gates, which have a total length of 275 feet.

#### Concreting Methods.

The total amount of concrete in the Elkhart dam and plant is 20,022 cubic yards. In this plant and protection walls built up-river from the plant there were used a total of 29,130 barrels of Wolverine cement, manufactured by the Wolverine Portland Cement Co., Coldwater, Mich.

The total amount of reinforcing steel used in the dam and plant was 616,500 pounds.

For the most part the concrete aggregate consisted of gravel which was obtained within a few hundred feet of the work, so that no hauling was required. This gravel contained approximately the proper proportion of sand for making a dense concrete, and for heavier mass portions of the dam and other parts of the work it was used without screening or washing. All of the thinner walls of the dam, which were built during the winter of 1911-12, were made from a mixture of broken stone and gravel aggregate, in varying proportions so as to secure the greatest density, and with an amount of cement not exceeding 1¼ barrels to the cubic yard of aggregate.

As soon as the weather permitted, in the spring of 1912, a washing plant was installed on the right bank of the river and within 200 feet of the end of the dam. The gravel bed lay immediately adjacent to this washing plant and the gravel was excavated and delivered within reach of a derrick by means of a scraper bucket on an endless cable, the sheave at the far end being attached to a transverse cable, thus giving a fan-shaped area to the pit. The gravel was hoisted by means of a derrick and a clam-shell bucket to the receiving hopper of the washing plant, from which it was washed by a stream of water from an ordinary 4-inch centrifugal

pump. A trough 1 foot 6 inches wide and 12 inches high, lined with sheet iron, led on a 7 per cent grade from the receiving hopper to the sorting hoppers, the first of these hoppers taking the heavier gravel and the second the sand, the silt passing along with the water.

As the amount of sand in the natural gravel was quite uniform, and by frequent tests was found to be the proper amount to produce dense concrete, it was feasible to remove the partition between the sand and gravel pits and discharge both of the sorting hoppers into a common bin. The cost of excavating and washing of the gravel, including plant depreciation, but without overhead, such as office charges, was about 18 cents per cubic yard.

The mixers were placed close to the washer and the mixed concrete was delivered to the work by means of one-half yard sidedump cars running on 24-inch gage tracks, the maximum length of run being about 550 feet to the extreme side of the powerhouse. The mixers were located on the right side of the river at the end of the dam, consequently the average haul for concrete in the dam itself was about 150 feet.

In the powerhouse section the following is a fair example of the labor cost of digging and washing gravel, mixing and placing concrete:

	Yards.	Total Cost per cost. yard.
Washing sand and gravel..	1,690	\$299.64 17.7c
Feeding mixer.....	1,530	260.17 17.0c
Operating mixer.....	1,530	79.94 5.2c
Running concrete cars, 550 feet .....	1,530	222.77 14.6c
Labor in forms.....		244.58 16.0c
General: interpreter, fore- man, etc.....		251.08 9.9c
Total per yard.....		80.4c

Note:—No overhead included. Cost of putting on top is included. It should be noted that common labor was paid \$2.25 per day, and that the work was run short-handed throughout and at a much diminished efficiency.

The Elkhart dam and plant was built on force account by the owner; F. A. Bryan, president and general manager of the Indiana & Michigan Electric Co., giving personal attention to the work, which was in charge of B. J. Campbell during the fall and winter of 1911; and later, following Mr. Campbell's illness and death, was completed by D. L. Davis, who was responsible for the general layout of the gravel washing and concreting equipment. The electrical design and construction was in charge of Lucius B. Andrus, Mem. A. I. E. E., general superintendent and electrical engineer for the Indiana & Michigan Electric Co. The Fargo Engineering Co., of Jackson, Mich., designed the dam and the structural and hydraulic features of the plant, and their resident engineers were D. N. Showalter and H. M. Morse.

### Concrete Drain Tile.

The constantly increasing value of farm land is compelling the farmer to utilize every available foot of his premises. Fields formerly swampy or under water are being drained and used. This has led to a constantly increasing demand for drain tile of all sizes.

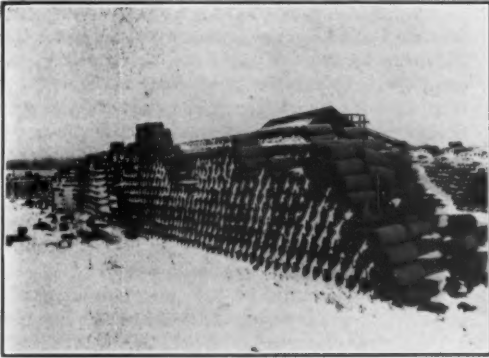
The farmer, however, often finds it difficult to procure drain tile which will meet his needs. The ordinary clay tile has, in a majority of cases, to be shipped from some distant point, with consequent loss due to transportation charges and breakage. To overcome this difficulty cement-concrete tile are now being made where used. The owner of the farm is often fortunate enough to have an ample supply of sand and gravel, either on his own land or nearby. These two comprise the bulk of the materials used in the manufacture of concrete tile. For the smaller sizes it is not necessary to have



THE ELKHART, IND., DAM AND POWER PLANT

gravel, as only Portland cement and sand are used.

A Portland cement of any standard brand will be suitable. The sand should be clean and coarse, with the particles well graded from fine up to one-fourth inch in size. If gravel is used for very large pipes, it should be clean and also well graded in size, the pebbles running from one-fourth inch to three-fourths inch in diameter. When only cement and sand are used the concrete should be mixed in the proportion of one part Portland cement to two and one-half or three parts sand, measuring these materials by volume. For measuring purposes it is safe to assume that one bag of cement is one cubic foot. In very large sizes of



CEMENT TILE STORED IN THE OPEN. FREEZING WEATHER DOES NOT AFFECT THEM.

pipe where gravel can be used, the concrete should be mixed in the proportion of one part Portland cement to 2 parts sand to four parts gravel. For most farmers a simple handmold for making pipe will be sufficient. These hand-molds are inexpensive and turn out pipe quite rapidly when properly operated. The molds consist of two cylinders of sheet iron, one set within the other. The inside cylinder is collapsible and the outside cylinder can be removed in sections. When hand-molds are used it is good practice to make up the tile during the winter, doing the mixing and placing of the concrete indoors, where there will be no danger of freezing. After the tile have become well hardened, say in about two weeks or one month, they can be placed outdoors until used. In this way the required number will be ready for laying by the time the frost is out of the ground.

#### Mixing the Concrete.

The first requisite for the proper mixing of concrete is a wellmade mixing board or platform. This platform should be made of boards carefully matched, in order that good tight joints will result. This will prevent any waste of cement and water from leaking through. A mixing platform 10 feet square will be large enough for all ordinary purposes. It is well to nail around the outside of the board a strip 1 inch in height, which will prevent the concrete from working over the edges. The tools necessary for mixing are generally at hand on all farms. They consist of shovels, rakes and hoes, and one or two water buckets. It is convenient to construct a bottomless measuring box for measuring the sand and gravel. The size of this box is determined by the proportions to be used. For a mixture of one part cement to three parts sand, the measuring box should contain 3 cubic feet. The sand and cement should be thoroughly mixed in the dry state, so that no streakiness or unevenness of color can be seen. When this is accomplished the water should be added, taking care that too much is not applied at first. The mixture should then be turned and mixed until a paste of even consistency results. For use in tile work the concrete should not be too wet. It should be what is called a dry mix. This dry mix is used so that the fresh concrete will hold its shape when the molds are removed.

#### Making the Pipe.

Before starting to mix the concrete the molds should be set in place on a level and solidly supported board platform. In setting up the molds the directions contained in the printed matter accompanying them should be followed. The surfaces of the molds which come in contact with the concrete should be well oiled with a heavy lubricating oil, which will prevent the fresh concrete from adhering to the iron. Deposit two or three inches of concrete in the molds and then commence the tamping. This tamping is accomplished by a long-handled tamper furnished with the molds, and so designed as to pass easily between the inner and outer mold. Continue depositing and tamping the concrete until the mold is full. Be careful to fill the mold gradually. If half filled with concrete at the start and then tamped this will not result in a strong and uniform pipe. The tamping should be done continuously from the time the first concrete is deposited until the mold is full. When the concrete reaches the top it should be struck off to a smooth even surface with a trowel or float. As soon as it is deposited and tamping is completed

#### CONCRETE ORGANIZATIONS.

American Cement Pipe Association—Secretary, E. S. Hanson, 538 South Dearborn St., Chicago.

American Concrete Institute—Edward E. Krauss, Secretary, Harrison Building, Philadelphia, Pa.

Association of American Portland Cement Manufacturers—Percy H. Wilson, Secretary, Land Title Building, Philadelphia, Pa.

Canadian Cement and Concrete Association—William Smith, Secretary, 57 East Adelaide St., Toronto, Ont.

Cement Products Exhibition Co., 208 South La Salle St., Chicago, Ill.; J. P. Beck, General Manager. Show, Chicago Coliseum, February 10-17, 1915.

Iowa Association of Cement Users—Secretary, H. H. Dean, Glenwood, Ia.

National Conference on Concrete Road Building—J. B. Beck, Secretary, 208 South La Salle St., Chicago.

Nebraska Cement Users' Association—Sec.-Treas., Frank Whipperman, Omaha, Neb.

Northwestern Cement Products Association—J. C. Van Doorn, Secretary, Security Bank Bldg., Minneapolis, Minn.

the molds can be removed. In doing this care should be taken to avoid jarring the fresh concrete, as this might result in the collapse of the pipe.

#### Curing the Pipe.

After the molds are removed the pipe should be allowed to rest undisturbed for twenty-four hours. They should then be kept wet by means of sprinkling or covering with burlap or rough cloth. Keep the covering moist. The pipe should not be allowed to dry out for at least one week. It will be found that this "curing" will add greatly to the strength and durability of the pipe. After thorough curing the pipe can be removed to the storage place. They should not be roughly handled, however, until one or two months of age. During the winter time it is best to protect the tile from freezing temperature until one month after making. Hand-molds may be obtained for making either plain straight pipe or pipe with bell and spigot ends. Bell end pipe are somewhat more difficult to make. There are several machines on the market which run by power and which turn out tile in much larger quantities than can be done with the small hand-molds. These machines are costly and would be necessary only

where the quantity of pipe would be sufficiently large to warrant the extra expenditure.

In conclusion, success in this undertaking, as in every other form of concrete construction, depends upon the selection of proper materials and careful and thorough workmanship.

#### NEW INCORPORATIONS.

Harris Construction Co. Capital \$5,400. Manufacture cement blocks, etc. Treasurer, Noah Harris, California, Pa. Directors: Samuel Harris, Albert Harris, Ames C. Harris, all of California, Pa.

The Concrete Engineering Co., of Omaha, Neb., has filed articles with a capital of \$75,000. C. Louis Meyer is president and treasurer; John M. Towle, vice-president, and G. C. Staehle, secretary.

Condon Concrete Post Co., Dixon, Ill., is a new incorporation; capital stock, \$3,000; manufacture cement post machines, posts, cement products. H. W. Garnett, E. J. Condan, and J. W. Gelly, incorporators.

The W. L. Rogerson Co. has been organized at Wheeling, W. Va., and will engage in the manufacture of cement blocks, vaults and various concrete products, and also bid on contracts for all kinds of concrete work. The capital stock will be \$5,000. Among the more prominent members of the company are H. W. Rogers, president, and W. L. Rogerson, of McMechen; F. C. Schroder and John Emig, of Wheeling; Ben Dorsey, of McMechen, and Dr. M. A. Dowler, of Glendale.

The Norwalk Vault Co., of New York, has been incorporated with a capital of \$25,000 for the purpose of operating quarries and dealing in stone, cement and other building material. The incorporators are W. F. Wilcox, East Orange, N. J.; B. C. Brown, Bound Beach, Conn., and K. N. Goode, New York City.

The Sullivan County Concrete Tie Co., of Sullivan, Ind., has been capitalized at \$100,000 for the purpose of manufacturing and dealing in railroad ties and building materials.

Empire Fireproofing & Concrete Construction Co., Manhattan, N. Y.; \$7,500; Wladyslaw Kuliberda, 13 Diamond street, New York; John Voychok, John Tresidder, New York.

The Concrete Building & Construction Co., of



CEMENT TILE READY FOR LAYING.

South Norwalk, Conn., has been organized with \$15,000 paid in.

P. T. Burke and others of Marysville, Kan., have organized a company in that town for the purpose of manufacturing interlocking cement stave silos. An old mill has been equipped for manufacturing purposes.

The capital stock of the Waterloo Cement Machinery Co., of Waterloo, Ia., has been increased to \$200,000.

The Universal Concrete Co., St. Joseph, Mo., filed articles showing a capital stock of \$4,000. The shares are held as follows: E. P. Halsey, ten; James E. Gates, twenty, and Joseph V. Fennell, ten.



# CEMENT

## New Chicago Offices Characteristic of the Universal Portland Cement Company.

Fourteen years practically cover the entire history of the Universal Portland Cement Co. During that period its growth has been rapid and continuous, and from an output of only a few thousand barrels in 1900 it has increased to nearly 12,000,000 barrels per annum at the present time. This growth has been due largely to the exceptional foresight and energy of the president, Edward M. Hagar, and to the excellent organization with which he has surrounded himself. The consistent development of the company is well illustrated in the enlarged office requirements of this highly specialized and efficient organization. Practically an entire floor of 33,000 square feet in one of the largest buildings of its kind in the world, the new Continental & Commercial Bank building, Chicago, is necessary to accommodate the various departments of the general offices.

A visit to these elaborate offices at once impresses one with the thoroughness and completeness of the efficient business system identified with this organization. Stretching around either side of the quadrangle formed by the building floor plan, in logical sequence from the executive department quarters, are, on the one hand, the spaces assigned to such departments as the Sales, Accounting and Credit, and Traffic, while connecting on the other hand are those of the Publicity, Inspection and Information bureaus, and Engineering department.

A large section of the office is devoted to the work of the Information bureau, which, starting a little more than an idea 10 years ago, has developed considerable magnitude, requiring such subdivisions as inquiries, extension, education, library, field division, laboratory and general office work.

The very important work of the Sales department is carried on in the large offices shown on this page, from which there may be had an idea of this exceptionally well-ordered organization, which, supplemented by branch offices and innumerable dealers in all cities of importance, covers in its various ramifications the sections of the country which the company can serve to advantage.

Similarly well arranged spaces accommodate such essential and important divisions as the Accounting and Credit departments, the Engineering department and the Publicity bureau, the intrinsic value



OFFICE OF PRESIDENT EDWARD M. HAGAR, UNIVERSAL PORTLAND CEMENT CO.

of whose work is probably out of proportion to the space required.

In connection with the Publicity bureau, but on another floor, is a large mailing room, through which all the advertising matter of the company passes. At times as many as 40 people are engaged in addressing and mailing.

As the business is constantly increasing in volume new plants are continually being erected or projected, and a large engineering department is engaged in this work. This work comes under the direction of an assistant to the president, who is in charge of all construction and operation.

Notwithstanding the potential importance of the work and the responsibility of the Executive department, its quarters, of which an idea may be had from the illustration, are comparatively simple and unpretentious, thereby reflecting the personality of President Edward M. Hagar.

Carl Leonhardt, Hellman building, Los Angeles, Cal., has purchased a site at Victorville, Cal., and will erect a cement manufacturing plant, with a capacity of 2,000,000 sacks of cement annually.

## Louisville Cement.

Louisville, Ky., Sept. 5.—Business with the local cement manufacturers and jobbers has been fairly good in the retail line, but big sales for contracting jobs have not been as numerous as expected. The European situation is beginning to be felt in the cement world. Practically all contracts started are being pushed along, but concerns which depend upon European markets for floating bonds have retrenched and no new work is being let, as money is a little too tight.

Some concern was felt in Louisville at the outbreak of the European war over the safety of Mrs. Will S. Speed, wife of the president of J. B. Speed & Co., and who with the two children was in Gloucestershire, England, at the latest reports. Since that time, however, the party, which included a maid and governess, has been located and will return to this country shortly. The state department took the matter up for Mr. Speed, and managed to locate the party.

C. M. Timmons, sales manager of the Kosmos Portland Cement Co., of Louisville and Kosmosdale Ky., reports that the company's mills are running full and some big contracts are now being delivered on. The city contract for 1915 was recently awarded the company. This contract is a good one and generally takes 15,000 to 20,000 barrels per annum. Mrs. Robert Horner, wife of the president of the company, was in Venice at the outbreak of the war, with tickets for an Austrian point, but decided to stay in Italy until things simmered down.

Sterling Cement Corporation, Albany, N. Y.; capital \$1,500,000; incorporators, John H. Devine, Boston; Edgar B. Hammond, George H. Hedge, New York.

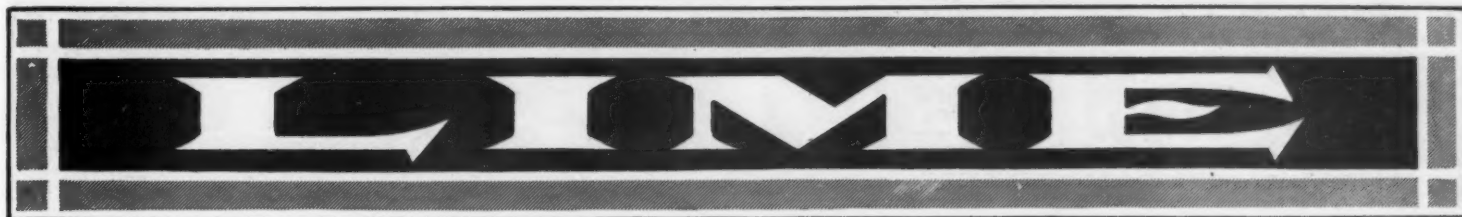
For the first time in several years holders of 7 per cent cumulative preferred stock of the Peninsular Portland Cement Co., of Jackson, Mich., received a 3½ per cent dividend payment. With the check was a communication from officers of the company explaining that practically all of the concern's obligations have been cleared away and expressing the belief that more frequent distributions of profits will hereafter be made among stockholders.



SALES DEPARTMENT, UNIVERSAL PORTLAND CEMENT CO., CHICAGO, ILL.



INFORMATION BUREAU, UNIVERSAL PORTLAND CEMENT CO., CHICAGO, ILL.



## Outside and Inside Lime Coatings

Hydrated lime in whitewash makes an ideal material for such work. Old-fashioned whitewash has fallen into disuse to a very great extent because for a very long time there has prevailed an opinion that whitewash when used outside would wash off with the first rain that came along, and it was discarded for interior use because of the opinion that it would rub off, or practically dust off. Now, both of these objections were well founded and were doubtless based upon actual experience, but such objections are not to be found with whitewash that is made from hydrated lime.

There is no doubt that the failure of old-time whitewash and its falling into disuse was caused by the inefficient slacking of the lime, for in 99 cases out of 100 the lime that was used in whitewash was "burnt" in the whitewash bucket or tub as the case may be. The resultant material was merely whitened water and did not carry the necessary body of lime to make the practically impervious coating that is indispensable. When the lime is hydrated the added water to make it into a whitewash can be regulated perfectly and when stirred constantly while the water is being added the pulpy, stringy, semi-putty which is the desirable thing to use for whitewash is very promptly developed. What is wanted in a perfect whitewash, as the writer has observed in his own work, is to work the water into the lime so as to give it about the consistency of fresh milk (milk of lime) after it is cooled off thoroughly, and it should be stirred until it is cool.

When applying whitewash to rough cement surfaces, to stone, brick or wood, where it is exposed to the weather it is found desirable to add about 10 per cent of Portland cement by weight, that is to say, a 40-pound bag of lime should have four or five pounds of Portland cement added to it after the whitewash has been stirred and become cool, after which apply to the surface to be covered promptly. The result will be a good stable coating.

In covering a plastered surface with whitewash a little more water can be worked into the lime and a little well-dissolved glue can be put into the mixture with good effect. Such whitewashes can be tinted by the use of pure oxide dry colors with very pleasing results.

There is a big field for the domestic use of a great deal of hydrated lime in whitewash. Every cellar and basement, the interior of every barn and cow stable, and nearly every farm building should be whitewashed at least once a year. The sanitary and purifying value of the lime coat can hardly be over estimated and the cost really amounts to nothing in comparison to the benefits that it gives. Very few farmers of the present day know anything whatever about whitewash which is almost as essential for the preservation of the health of chickens, cows and the other domestic animals of the farm as the food that they eat.

The dealers who sell hydrated lime in every rural community ought to be systematically made acquainted with the inherent advantages which hydrated lime offers for the making of improved whitewash.

This sounds odd because nearly everybody thinks they know all about whitewash. As a matter of fact none of us know very much about whitewash

made from hydrated lime. The writer has been working up some original experiments and finds that his hydrated lime whitewash gives most surprising results for durability, both outside and inside, and it is much easier and cheaper to make than the old-fashioned whitewash made from lump lime, which in the practice of whitewashing was nearly always a total failure.

In taking the matter up systematically it will be found that practically every producer of hydrated lime has it in his grasp to teach his trade how to use hydrate in the making of whitewash, which will bring on a constant and permanent annual consumption in the domestic field in this way. Beyond the feature of making a lead into domestic whitewash there is unquestionably a field yet to be developed, which can be achieved with certainty. Mixtures or hydrate can be manufactured with dry colors and sold for domestic use as pinks, light greens and light blue, the tints that people want to use on the walls of the best room in the house. These are more effective than wall paper and anybody can use them anywhere. Such mixtures could be sold at retail at five or ten cents a pound and make it well worth while to produce such a universally usable commodity.

Very probably the field of whitewashing and wall coating if developed to its fullest capacity in this country, and particularly throughout the South, with a possibility of extending the business into tropical countries abroad can be worked into a very attractive commercial proposition.

### Record Year in Lime.

1913 Output Was 3,595,390 Tons, Valued at \$14,648,362.

The manufacture of lime in the United States in 1913 broke all previous records, the production amounting to 3,595,390 short tons, valued at \$14,648,362, according to R. W. Stone, of the United States Geological Survey. This was an increase over 1912 of 65,928 tons in quantity and \$678,248 in value. The average price per ton in 1913 was \$4.07, as compared with \$3.96 in 1912 and \$4.03 in 1911. While Pennsylvania is the largest producer, the output of this state is only 2.36 per cent of the total, indicating the wide distribution of the industry; in fact, 44 states reported to the Survey a production of lime in 1913.

Lime used in building operations represents nearly a third of the total output, but large quantities are sold to chemical works, sugar factories, tanneries, etc., as well as to farmers for broadcasting on agricultural land.

### LIME MANUFACTURERS TO BENEFIT BY EUROPEAN IMBROGLIO.

"It is clearly shown to one who will give study to present trade conditions resulting from the European war that the business of this country has been very materially affected through doubt as to the length of the hostilities and our ability to market our products abroad," says the Bulletin of the Lime Service Bureau. "The administration proposes to do everything it possibly can to prevent a commercial depression in this country and to aid in keeping our supply of gold intact. When the war

started, the American public seemed to discuss only the dark side of the effect of the European trouble on the business conditions of this country, but now we begin to hear and observe how this great European conflict will cause a wider demand for many American products, that heretofore did not exist when the supply from abroad was obtainable. So, the manufacturer of lime should look into this situation and see whether or not his product can meet the conditions existing from the lack of European supply. There has been brought to the attention of the farmer how he can meet the potash famine through the use of lime as a stimulant to awaken or liberate the insoluble potash in the soil and make it available as plant food."

### BUSINESS LETTER FORM FOR 1915.

Due to the many rules and regulations laid down by Congress, the average man's business letter in future may be about as follows:

(Model No. 1—Quoting price for goods.)

Smith Manufacturing Company, Rochester, N. Y.

Gentlemen—Referring to your letter (see Postal Regulation p. 126, pp. 44) of the 28th, we (a corporation organized under the laws of Ohio, certificate filed in the office of the secretary of New York state, New York) beg to advise you that we can quote the price of \$20 (see United States Revised Statutes, laws of 1914, sec. 18) per ton, carload lots (see interstate commerce ruling 256; see also dicta in 128 U. S. 264; Brown vs. Pennsylvania R. R. Co., 168 Pa., 267). This quotation is special to you (see ruling of department of justice in the matter of Brown Milling Co.—) and is made subject to our right to claim immunity (see N. Y. penal code, pp. 48). If you receive a better quotation from any of our competitors you will, of course, advise us under the authority of U. S. Revised Statutes, pp. 2247, sub. 2. We shall be glad to fill your order, subject to rule laid down in leading case of Jackson vs. Cobb, 126 U. S. 232) and will ship according to your instruction (see Rule 37, New York Public Utility Commission).

Very truly yours,

J. P. JONES,

President Jones Manufacturing Co.

State of Ohio, County of Fairfield, ss.

J. P. Jones, being duly sworn, deposes and says: That he has submitted the foregoing letter to his counsel and has been advised that it is legal. That deponent is not a director of any bank, trust company or transportation company. That the Jones Manufacturing Co. has never had its charter forfeited, nor has deponent ever been indicted by either state or federal grand jury.

P. P. WHITE,

Notary Public.

Steacy & Welton Co., Bittings Station, New Oxford, Pa., will erect a manufacturing plant costing \$20,000; lime burners.

Latham Lime & Stone Co.; operate in Pennsylvania; capital stock, \$500,000; incorporators, Ralph Snyder, E. H. Latham, F. E. Stevens, M. A. Corbett and J. E. Tesseymann.

The Henderson-Frazier-Dobbs Co., of Camden, N. J., has been organized for the purpose of dealing in brick, tile and other building material. They have been incorporated for \$100,000.



# With the QUARRIES

## Buy Pumps Intelligently.

With the coming of fall and the approach of the closing of the season in quarry operations it is time to consider the matter of pump equipment to keep the quarry pits clear for next year's operations. The excess of spring rainfall, together with the frost storage of surface water, and with the regular underground feeds, makes the start of every spring's operation in deep quarries the first big problem to tackle. We have seen many pump installations hurriedly provided in the spring of the year that proved to be a total failure for many reasons, sometimes the wrong type of pump had been provided, another time the installation was not properly made, again the power drive was inefficient or incorrect but in very many cases the result was all the same. It occurs to us just now to suggest that it is a good idea to decide now while the pit is clear just where next spring's operations will be opened, and tackle the pump proposition in an intelligent manner and not in the haphazard and altogether distressful way which every quarry operator is so well acquainted with.

In our travels recently we had occasion to visit the plant of the American Well Works at Aurora, Ill., which concern supports perhaps the best aggregation of "pump doctors," as the quarrymen call them, or more properly speaking, hydraulic engineers, that the country affords. They build every type and kind of power-driven pump that could be needed in any quarry operation, and they are prepared to provide and install the exact pump that is needed for each particular case. In order to purchase the right pump economically, it is necessary to state the exact conditions under which the pump must work. Then it is certain that the hydraulic engineers can provide exactly the pump suited to the work that is to be done. The Aurora concern maintains a hydraulic laboratory in which all pumps which they build for special purposes are tested so as to determine the total head and capacity of the pump together with the balance of sizes between the suction and the discharge pipes. It is necessary for the man who wants to buy a pump intelligently to find out the amount of water to be pumped, the type and amount of power available to drive the pumps and the physical conditions surrounding their constant operations. With these details carefully stated the hydraulic engineer can work out the type, the size, the balance and the head so that pumping satisfaction can begin as soon as the machine starts into operation. Such a pumping outfit will mean satisfaction all the time. Probably there is no other way to secure anything like the results needed without expensive experimentation at the quarry.

## FIRES BIG BLAST.

Approximately 80,000 tons of rock were dislodged with a charge of three and a quarter tons of dynamite at the immense quarry of Strunk & Hartman, at Limekiln, Pa., recently. A clipper drill was used in the blast. Much credit for this is due to the expert work of T. F. McDevit, of Allentown, Pa., who drilled the holes, 38 in number, requiring two months to complete the work. The total cost of the blast was \$1,700, but it will keep the quarry active for a year. The holes vary in depth from 28 to 45 feet. The dynamite used was two tons of 60 per cent and the balance of 40 per cent.

The crusher of the company is operated by elec-

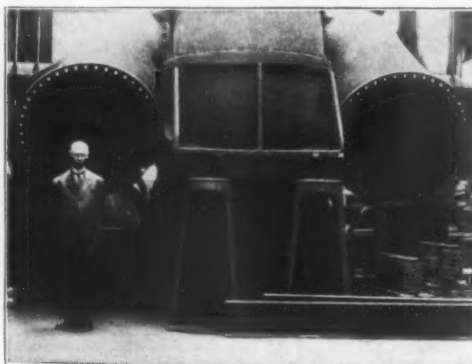
tricity. Five grades of spalls are made and shipped to various points in Berks county. Concreters, macadamizers and the Reading Transit Trust Co. use up the greater amount. This firm supplies about one-half the spalls used in the city of Reading. An extra shift will be run from now on to get out the orders already booked. There will be ten men to a shift.

At present the firm employs 17 men, with which force 300 tons of spalls are turned out daily.

The firm consists of Samuel H. Strunk, of Limekiln, Pa., and Ezra G. Hartman, of Reading. They have been in business for almost five years. The plant is valued at \$24,000.

## EXHIBIT BOOSTS MACADAM ROAD.

L. B. Hodgkin, president of the Kokomo Stone Co., can be congratulated on having the most popular exhibit at the Kokomo, Ind., \$100,000 Exposition, Aug. 31 to Sept. 5, in showing a cross-section



A MAMMOTH IRRIGATION PUMP AT THE AMERICAN WELL WORKS, AURORA, ILL.

water bound macadam road, six feet long and three feet wide, with very attractive decorations, having it as near a country highway as possible.

A large placard calling the attention of the visitors at the booth that the sample road was a "real" water bound macadam roadway, and the cross-section showed the different layers of stone, demonstrating the proper way to build this type of a road. This booth was the headquarters for all good roads boosters.

The city of Kokomo can boast of having the largest exhibit of its kind ever held in the state of Indiana.

The Cyclone Drill Co., Orrville, Ohio, has issued a 64-page brochure on the Cyclone Cable Tools. This catalog is most complete in its explanation and illustration of the Cable Tools and the other well-known products of this company.

An exchange report is to the effect that the General Crushed Stone Co. will abandon its property near West Myerstown, Pa., and will dismantle all the machinery and ship it to quarries of the company located elsewhere. The buildings will be razed. The abandoning of the quarries is due to the large body of water therein, it is stated.

The Birdsboro Stone Co., having a royalty lease upon Gibraltar Hill, Reading, Pa., is still prospecting for traprock and making tests. Excellent success is resulting and the indications are that soon a large crusher plant will be installed, and employment given to many workmen.

## Kansas Crushers Supplying Normal Demand.

Kansas City, Mo., Sept. 4.—Trade in Kansas City is waiting watchfully for the expected fall business to open up. There is much big work in the offing, which rock men believe will without doubt be undertaken, and already there are signs that the tension due to the war is lessening. Temporarily some of the big work already started is held up by strikes, but this condition is not considered serious, as the problems seem to be working out.

Hood Lyle, of the Lyle Rock Co., states that their crusher is not running half the time; many of the jobs for which they are furnishing materials are tied up by the labor controversy.

Alexander King has disposed of his interest in the Alexander King Stone Co., with offices in the Massachusetts building, and has retired from active business. His position as president of the company is filled by John R. Malcolm, recently elected. P. E. Attick resigned as secretary, and was succeeded by Robert K. Pierson. The Alexander King Stone Co. has been well and favorably known in this territory for years. Their mill is at Ellettsville, Ind., where they produce and sell Bedford, Ind., limestone.

The Rosedale Crushed Rock Co. at Rosedale, near Kansas City, has had fully its share of the big business this year from railroads and others building elevators to store the big wheat crop of Kansas. The Rosedale concern supplied the Great Western elevator with about 10,000 cubic yards, the two Milwaukee elevators with a total of 10,000 yards. The company is furnishing several thousand yards a month for ballasting the terminals in the new arrangement of tracks involved in the new union station plans; other crushers also get some of this business. The Rosedale company has gradually equipped its plant so that it can supply every grade of rock and dust used in roadmaking. Not a call for rock comes to it that it is not able to fill. This has involved considerable expenditure for machinery, but has paid many times over in the satisfaction of never having to turn down an order for road materials. The company has been in existence about eight months; it turned out five cars a day at first; now it turns out 20 cars a day.

## NEW INCORPORATIONS.

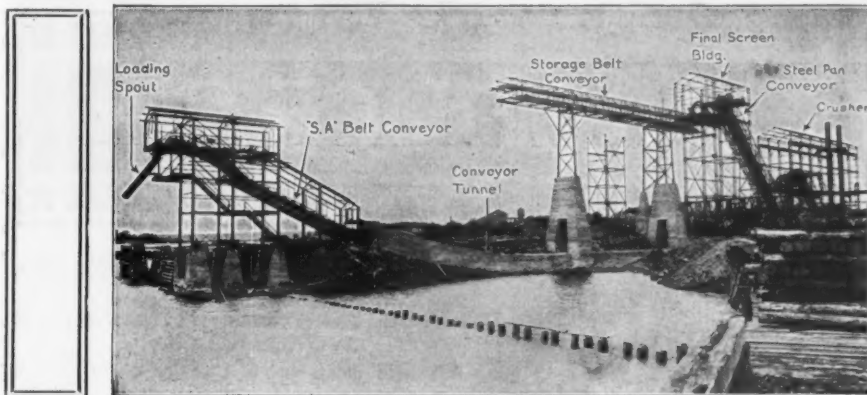
Norton Stone & Lime Co., Cobleskill, N. Y., has been incorporated with a capital stock of \$100,000 by S. C. Shaver, F. K. P. and A. L. Norton.

The St. Laurence Quarries, Inc., of Gouverneur, N. Y., has incorporated with a capital of \$75,000.00 to conduct a general quarrying and contracting business. The incorporators are R. F. Callahan, J. C. Callahan and C. W. Smith.

The Jefferson & Clearfield Stone & Sand Co. has been organized at Falls Creek, Pa. It was capitalized at \$15,000.

The McCabe Quarries and Building Material Co., at Charleston, S. C., has been incorporated with a capital stock of \$150,000 to engage in the running of quarries and in the building material business.

Barto Stone & Cement Block Co. Capital \$30,000. Mining, quarrying, etc. Treasurer, Wm. Hallman, Pottstown, Pa. Directors: Joseph Barr, Allentown, Pa.; John W. Fisher, Douglassville, Pa.; Bert W. Luckenbille and Livingston Sayler, of Pottstown, Pa.



GENERAL VIEW OF PARTLY COMPLETED PLANT.

The San Dimas Rock Co., Santa Ana, Calif.; install rock crushers, etc.; incorporators, John Cubbon, O. L. Halsell, D. N. Kelly, Wm. F. Lutz and E. W. Forgy.

The Ottawa Crushed Stone Co., Ottawa, Ill.; capital stock, \$20,000; operate stone quarries.

The Marquette Trap Rock Co., Marquette, Mich.; capital stock, \$40,000; quarrying, manufacturing and crushing of stone, rock, gravel, sand, etc.

The Farmers' Limestone Milling Co., Robinson, Ill.; capital stock, \$50,000; incorporators, Wm. H. Dye, Joseph P. Gallion and F. X. Siler; mining, baking and milling limestone.

Dartmoor, Ltd., Toronto, Ont., Can.; capital, \$163,000; quarry stone, sand and gravel, etc.; Louis F. Black and others.

### Trap Rock Crushing Plant at Bruce Mines, Ontario

**Two 40-inch "S-A" Belt Conveyors Load Vessels From Storage at the Rate of 1,500 Tons Per Hour.**

The great amount of macadam and concrete road building being done at the present time is developing an immense field for crushed rock and gravel as road materials. Trap rock is one of the best materials so far used for this purpose. The price of trap rock in the central West, however, has heretofore been prohibitive, as the main source of supply is confined to the mountainous districts with a few small deposits in Minnesota and the upper Peninsula of Michigan. These last two necessitate rail shipments and, consequently, are only worked in a small way.

Large bodies of trap rock have lately been discovered by S. B. Martin, a large quarry owner and operator of Sault Ste. Marie, Mich. These bodies are located at Bruce Mines, Ontario, 40 miles east of the Canadian Soo on the shores of Georgian Bay. An exceptionally large crushing plant has been erected here under Mr. Martin's supervision for the Martin's International Trap Rock Co. This plant will be able to supply crushed trap rock at a low cost to all cities on the Great Lakes, due to cheap water rates; it also has a large available market in Canada, as it is connected by rail to the Canadian Pacific Railroad System.

The quarry equipment consists of two 110-ton steam shovels, two large electrically operated churn drills and 25 eight-yard steel automatic dump quarry cars. Material is hauled to the crushers in eight-car trains by two 45-ton locomotives.

The plant is interesting in its large capacity of 500 cubic yards per hour, the large size of the initial crusher, and its facilities for handling, storing and loading crushed rock to the lake vessels at a rate of 1,500 tons per hour.

The initial crusher, which receives the rock direct from the quarry cars, is a seven-foot by five-foot Superior jaw crusher which reduces the material to about 10 inches. This crusher is said to be the

largest of the type ever built, and it was furnished by the Power & Mining Machinery Co., of Milwaukee.

From the large jaw crusher, the material passes over a short grizzly, the fines going directly to a 48-inch by 76-foot steel pan conveyor, and the oversize passing to two No. 9 McCully crushers. The material from the No. 9 crushers is discharged to the same pan conveyor by which it is elevated and delivered into an 84-inch by 18-foot cylindrical screen. From this screen the fines are discharged in a 48-inch by 116-foot steel pan conveyor, the oversize going to two sets of 54-inch by 24-inch Superior rolls. The rolls discharge into this same conveyor, where the material is carried to a second 84-inch by 18-foot screen. The larger finished sizes from this screen are delivered to storage piles by gravity chutes and "S-A" belt conveyors, the fines being delivered to a cross conveyor and sent to two 4x12-foot double-deck shaking screens; after screening, the fines go to other storage piles by gravity chutes and "S-A" belt conveyors.

The storage plant is an interesting feature, both on account of the capacity and the method of handling the rock. The storage provides for approximately 80,000 cubic yards. There are two rows of storage piles and stone is distributed to these piles from "S-A" belt conveyors supported on the steel trestles above the piles. The belt conveyors used for this purpose consist of one 38-inch by 72-foot conveyor and four 20-inch conveyors aggregating 497 feet. The several sizes may be stored at the rate of 500 tons per hour. Under each pile is a concrete tunnel with feeding hoppers in the

roof for feeding the material to the conveyors. Each tunnel is provided with a 40-inch "S-A" belt conveyor, 330 feet long, each conveyor being capable of loading stone at the rate of 750 tons per hour, or a total of 1,500 tons per hour. Near the discharge end of each conveyor is installed a Merriek Weightometer, which automatically weighs the material delivered by each conveyor. With this system, it is possible to load the largest vessels within a few hours.

The layout of the plant and the location is such that a duplicate plant can be installed at a later date, or the storage can be increased in the present plant to 120,000 yards, if desirable, by the addition of one concrete tunnel with loading conveying and overhead distributing conveyors.

The adoption of "S-A" belt conveyors for storing and reclaiming the crushed rock is in line with general practice in the largest crushing plants in many parts of the country. In a plant of this character profits depend upon continuous operation and large capacity and all machinery must give perfect assurance of meeting these demands.

The Trap Rock Crushing Co., New Richmond, Wis., will soon begin operations.

R. L. Smith Co., Hancock, Mich., has been awarded contract by the city council, for one No. 9 Tel-smith jaw crusher and one 25-ton portable bin, costing \$1,750.

The quarry of the Pacific Portland Cement Co., at Auburn, Calif., was recently put in operation with two complete shifts of men. Two hundred men are employed.

The new stone crushing plant of Lehigh Valley Transit Co., Lehigh Valley, Pa., is now in operation and is supplying not only the ballast required by the company's railway but is also selling stone to the state highway department in large quantities for the improvement of roads in the vicinity.

The Buffalo Sand, Stone & Brick Co., Buffalo, N. Y., has been at work since May installing machinery to double its capacity. Business has been rather light with them recently, however, so that the company is not yet ready to begin operating the new equipment. It is expected that the second press will be running in about a week.



ONE OF THE LOADING CONVEYORS EMERGING FROM THE TUNNEL BENEATH THE STORAGE PILE.



# GYPSUM PRODUCTS

## Enlarging Plaster Plant.

**Connecticut Adamant Plaster Co. Trebling Capacity of Their Plant in New Haven—Improvements to Nova Scotia Plant, Also.**

The increased demand for Adamant wall plaster has for some time been taxing the capacity of the New Haven, Conn., plant to the utmost, until enlargement has become imperative. A new and up-to-date plant was commenced some time ago and is now partially completed.

When finished the new mill will approximately triple the capacity of the old plant and will insure a total output sufficient to meet all demands. The new machines which are being installed are the latest and most improved for the manufacture of the highest-grade products. The entire plant has been equipped with electric service, each individual machine being driven by its own motor, so that the greatest uniformity possible is obtained.

It has been the aim of the company for a number of years to standardize plaster manufacture in the same way that the cement industry has standardized cement. Chemists have been constantly studying to work out a standard specification for plaster and plaster of paris, which standard shall be maintained in the process of manufacturing. The standard has been set at a very high mark by the company's chemists, and the product turned out is constantly tested, and kept above the mark. In a very short time these specifications will be published, so that any user can test the material and be assured by his own testing that he is receiving materials which pass certain requirements.

At the same time the improvements are being made at the New Haven plant there are going on improvements at the producing end in Nova Scotia. New docks of increased capacity are being constructed near the company's mines in the vicinity of Windsor, N. S., so that the shipments of the raw product may be greatly facilitated and increased.

All of the products of the Connecticut Adamant Plaster Co. are manufactured from pure Nova Scotia gypsum rock. Its manufacture covers the entire range of gypsum products, including wall plaster of all kinds, neat, pulp, and ready-mixed, plaster of paris, casting plaster, plaster board, gypsum partition blocks, etc.

## Louisville Plaster Situation Satisfactory.

Louisville, Ky., Sept. 5.—Wall plaster manufacturers and jobbers of Louisville have been busy all of this season and business has been perfectly satisfactory to everyone in the trade. A large number of the contracts have called for small houses and cottages and this style of architecture generally calls for more plaster in proportion than the finer residences. A few buildings have been erected this season, among them being a church and a large manufacturing building, in which the walls were finished in fine interior face brick, no plaster being used. A number of the school buildings are having a quantity of face brick used in the interior construction, but the variation has not affected business materially.

J. B. Campbell & Sons, who have been in the local game for a number of years, report that business has been entirely up to normal this season, and that

the company's plants are working to full capacity. Contracts for the most part have been small but numerous. In small contracts the percentage of waste is a great deal larger than in the larger buildings, as a rule.

All traces of the fire which came near destroying the plant of the Kentucky Wall Paper Co. have now been removed, and business is going along about as good as could be expected.

The Atlas Wall Plaster Co., according to W. Selke, president of the company, is handling just about the same amount of business as was handled last season. "The war is having no effect whatsoever on the plaster business in this city," he said.

R. B. Tyler & Co., who handle the U. S. Gypsum Co.'s products in Louisville, are not doing very much with wall plaster at this time, but expect to pick up several large contracts later on in the fall when some of the larger buildings are further under way.

The Union Cement & Lime Co. is now handling the Acme cement plaster and Acorn plaster in jute bags, also the Newark plaster, Acorn dental, and oxide of iron in wood. Peerless and Ricketson's mortar colors are also carried.

## NEW PLASTER GRINDING MILL.

Walton (Canada) is to have a new plaster grinding industry, to be financed by the Rock Plaster Co. of New York and Albert Parsons, M. P. P., who is in connection with the plaster business. The plaster or gypsum, with only one or two exceptions (the Windsor Plaster Co. and another concern in Cape Breton) is shipped in bulk and in quarrying from 15 to 20 per cent is lost, broken in the operations so small as to be unfit for shipments, and is thrown over the dump. It is currently reported that the parties named will erect a well-equipped mill for the grinding of plaster, some of which will be calcined for the New England trade and some shipped as land plaster to the Southern states. This will utilize the plaster hitherto consigned to the dump. The balance will be "cracked" into small lumps, an inch or two in diameter, to be ground in the New York plaster mills. The mill will cost fully \$100,000 and will give employment to a goodly number of men.

## HUGE GYPSUM DEPOSIT FOUND.

A company composed of Geo. Flournoy, E. P. Davis, H. J. Seacker, Wm. Harmon and A. J. Faust, all of Bakersfield, Calif., has been formed for the manufacture of gypsum products near Cottonwood Station, where a deposit consisting of two and one-half sections of gypsum and other minerals has been discovered.

A few days ago Attorney Emmons, acting for William Harmon, the largest owner of the property, and others interested, filed with the county clerk the articles of incorporation of the Bauxite Clay Co., a corporation formed to take in all the claimants to various parts of the land covered by these deposits, some of which are patented and some are still in the hands of the government.

The plaster factory of E. C. Bowman & Sons, Southville, Mass., was destroyed by fire recently at an estimated loss of \$30,000. The announcement has been made that the company will rebuild.

## New Plaster Plant at St. Joseph, Mo.

**The Diamond Plaster Company's Output Expected to Be Twenty Tons a Day.**

A plaster plant with a capacity of 40 tons of prepared wall plaster a day, is the latest addition to St. Joseph industries. The industry will be known as the Diamond Plaster Co., and will be located in the Cushman building at Third and Mitchell streets. The special machinery for the manufacturing operations was delivered Sept. 5, and will be installed ready for beginning work by the middle of the month.

The company, which is made up of J. W. Keicher and C. T. Kovich, will turn out six kinds of plaster, covering every requirement of building, and a careful survey of the building outlook there convinces them that at least 10 tons a day will be required to supply local demands. They will operate throughout a territory 60 miles in radius, and will manufacture just as the needs of the territory demand, so that the builders may have strictly fresh plaster at all times.

Mr. Keicher, president and manager of the company, has been for two years superintendent of the King Crown Plaster Co., Cedar Rapids, Ia., and before that had nine years' experience with the Pittsburgh Plate Glass Co. Mr. Kovich is an old experienced plaster man and will have charge of the factory.

The industry will employ several local men. It is expected that the growth of the business finally will require 20 in the force.

## UPHOLDS GYPSUM LAND CLAIMS.

A decision recently rendered by Assistant Secretary of the Interior Jones at Washington, was to the effect that it is lawful to file gypsum claims on California oil land when the latter is really the most sought after. By locating primarily for gypsum the expense of drilling expensive wells at a time when it may not be practical to do so is avoided. By stating in the affidavits that oil is sought—as has always been the practice—the charge of fraud is avoided.

This location of land for gypsum has been the prevailing practice for many years. If it is illegal, the number of illegal titles must be large. In the opinion of the best lawyers it has always been legal and proper. There is never any attempt made to conceal the fact that the land is believed to be valuable for oil and that that is what is really most sought after, the gypsum being but a secondary consideration.

## FIND GYPSUM ON MARYVILLE FARM.

Maryville, Kan., Sept. 4.—In drilling for water on the Nicholas Koppes farm, three and a half miles south of here, recently, drillers struck a vein of gypsum at a depth of 162 feet. Just how thick the vein is is not known, but it is thought, from the formation of the country roundabout the scene of drilling that the vein must be a thick one.

American Cement & Plaster Co., Lawrence, Kan., has purchased the plant of the Fishback Gypsum Co., near Port Clinton, O.

# SAND and GRAVEL

## Louisville Sand and Gravel.

### Heavy Rains Hamper River Operations By Reason of Muddy Waters.

Louisville, Ky., Sept. 5.—Heavy rains have fallen with regularity in the Louisville district for the past six or seven weeks, and the river is unusually high for the season. However, the sand digging operations have not been handicapped to any extent, except that the river is so muddy it is harder to dig clean sand. A large quantity of school building this summer is keeping the sand men busy on both gravel and sand, as a goodly portion of the work is of concrete construction.

Charles Newman and Richard K. Fowler, who recently purchased the business of the late Scott Newman, who handled Ohio river sand and gravel, have changed the name of the concern to the Newman Sand Co. The business is not incorporated, however, but is a partnership arrangement. Mr. Fowler was on the road for a mercantile house of Louisville for a number of years and he attends to most of the selling, while Mr. Newman looks after the teaming and delivery end of the business. The amount of business handled during the past month has been very satisfactory to both parties. The boys buy their sand from the Ohio River Sand Co.

Tom Nugent, secretary-treasurer of the Nugent Sand Co., said that business had been slightly off of late, but could be a whole lot worse for the season. The raise in the river has just been enough to bring a good deal of mud down on the digging operations. With a low stage of water digging is easy; also at a high stage where the water is going over the falls at Louisville, for during high water the mud is swept away and stands no chance of depositing on the sand and gravel beds.

Joe Lloyd, manager of the E. T. Slider Co., has been awarded the contract to furnish sand and gravel on a school building at Fortieth and Garland avenues. The general contract for the building was awarded to George H. Rommell Co. for approximately \$80,000. Several other school jobs have also been received.

J. R. Nugent, vice-president of the Ohio River Sand Co., is on a vacation trip to Ocean Grove, N. Y. Business is normal, according to John Settle, manager of the company.

Andrew Hoertz reports that business is quiet with him at this time and that a number of buildings which were to have been put up have been given up for the time being.

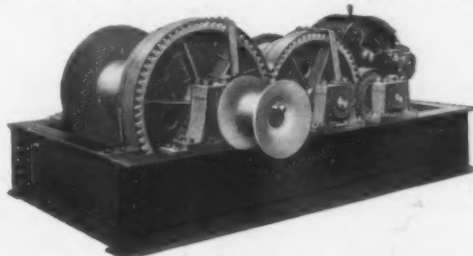
Several new features for this part of the country are noted in connection with the plans of the Louisville Sand & Gravel Co., which expects to begin operations near here by the middle of September. The company, capitalized at \$7,500, will develop a tract of some 16 acres on the Seventh street road south of the city, will use machinery for digging the sand and gravel, and, further, will wash the output. Heretofore pit sand concerns around Louisville have dug by manual labor and have not washed their product. By washing the output the new company will be in a position to compete with the river sand and gravel companies.

Grant Gravel Co. wishes to announce that owing to the large increase in business, they are now located in more commodious quarters in the Flat-iron building, at Market, Sutter and Sansome streets,

San Francisco, Cal. The company is also putting in very extensive new equipment in screens and conveyors which will increase its capacity and enable them to be ready at all times to supply all grades of concrete gravel, also road, roofing and topping gravel.

## The Buckbee Electric Hoist.

Electric hoists have been especially designed by J. C. Buckbee Co., engineers, Chicago, Ill., for the hard, continuous duty incident to excavator work. The frames of the hoist are of very heavy steel beams, making a bed that is not only absolutely rigid but is unbreakable, a most important feature, as excavator hoists seldom rest on anything but foundations of temporary character. The gears throughout are of cast steel with cut teeth. The drum shafts are of large diameter and run in babbitted adjustable bearings. The drums are cast in one piece, turned, balanced and brass bushed. Frictions are of double "V" type and brakes are of band type operated by foot levers. Controllers are of drum type and are



TWO-DRUM ELECTRIC HOIST.

attached to side of frame between friction and brake levers.

The motors are specially designed for the work and will develop 250 per cent of normal rating on starting. In excavator work a very large amount of power is required for a few seconds while the scraper is digging, after which the power requirement is nominal. It will be obvious these motors are most perfectly adapted to such work.

A winch head is usually provided on an extension of front drum shaft for use in erecting or moving excavator.

## SAND AND GRAVEL FOR FILTRATION PLANTS.

Clear-white quartz sand of the proper size is the common material used in filter beds, according to the United States Geological Survey. The floor of a filter may be made of broken trap, granite, or other rock screened to the proper size, or of clean sized gravel. The specifications for the filtration plants at Springfield, Mass., and Toronto, Canada, are practically identical, as follows:

"The filter sand shall be clean sand, with either sharp or rounded grains. It shall be entirely free from clay, dust, or organic impurities and shall, if necessary, be washed to remove such materials from it. The grains shall, all of them, be of hard material which will not disintegrate. The effective size shall not be less than 0.25 millimeter nor more than 0.35 millimeter. The uniformity coefficient shall not be more than 3.0. The sand shall be free from dust and shall not contain more than 1 per cent finer than 0.13 millimeter and shall be entirely free from particles over 5 millimeters in diameter. The sand shall not contain more than 2 per cent by weight of lime and magnesia taken together as carbonates. In all other respects the sand shall be of a quality satisfactory to the engineer."

## NEW INCORPORATIONS.

Louisville Sand & Gravel Co., Louisville, Ky.; capital, \$75,000.

Cape Breton Sand & Gravel Co., Ltd., Sidney, Cape Breton, N. S.; capital, \$30,000.

The Tideoute Silica Sand Co., of Tideoute, Pa., has been organized with a capital of \$200,000.

The Canton Sand & Gravel Co., Canton, Ohio, has been incorporated by E. L. Mack and others.

The Rock Island Sand & Gravel Co., Rock Island, Ill., has been organized with a capital of \$25,000.

The Vance Gravel Co., Batesville, Miss., has entered the field and is catering to the concrete trade.

The Wilson Sand & Supply Co., capital \$50,000, has been organized at Huntington, W. Va., to mine sand.

The Hatch Sand & Gravel Co., San Antonio, Tex., has been organized by H. J. Hatch and associates with a capital of \$10,000.

Absecon Sand & Gravel Concrete Co., 419 Market St., Camden, N. J.; incorporated with \$50,000 capital; sand and gravel, etc.

The Brown-Huffstetter Sand Co., of Indianapolis, Ind., has been formed to deal in sand and gravel. The concern is capitalized at \$25,000.

Marquette Trap Rock Co., Marquette, Mich.; incorporated with \$40,000 capital; quarry manufacture and crushed stone, rock, gravel, sand, etc.

River Sand & Gravel Co., Owensboro, Ky.; capital, \$10,000; mine gravel and sand from river and deal in coal, lime, cement, concrete blocks, etc.; P. A. Yager and others.

The Moraine Gravel Co., of Plymouth, Wis., has been incorporated with a capital stock of \$30,000 by C. R. Nutt, Grace Nutt and W. M. Hecker. The company will sell sand, gravel, crushed stone and will manufacture concrete blocks.

The New Jersey Sand & Gravel Co. has been incorporated at Trenton, N. J., with a capital stock of \$25,000. The incorporators are Julia Chadwick Clymer, Yardville; Louis F. Emman, Frank E. Weeden, and Wm. C. Davis, of Trenton.

The Clifton Sand & Gravel Co., at Niagara Falls, Ont., has been reorganized by New York and Toronto capitalists and will have head offices in Toronto. Arthur Bridge, who has managed the operations for years, will be continued as superintendent under the new management.

The Greyhound Gravel Co., recently organized in Dallas, Texas, by J. W. Crotty and others with a capital stock of \$100,000, is preparing to carry on operations on an extensive scale on its tract of gravel land situated eight miles west of Dallas, containing 132 acres and estimated to have 3,000,000 cubic yards of gravel. A spur track is now being built from the railroad to the pits. A three and one-half yard drag line machine will be installed to take out the gravel.

The Venango Sand & Stone Co., with offices in the Farmers Bank building, Pittsburgh, Pa., has been incorporated with a capital of \$25,000 and has purchased the property of the Kennerdell Silica Sand Co., at Kennerdell, Pa. They are now making extensive changes in the old plant and installing new quarrying machinery such as air compressors, drills, etc. The products of this company will be various grades of silica sand for steel foundries and rubble and dimension stone.



# CLAY PRODUCTS

## Paving Brick Convention.

The National Paving Brick Manufacturers' Association will hold its eleventh annual meeting at the Statler hotel, Buffalo, N. Y., Sept. 9, 10 and 11. The first day of the convention will be given over to business sessions. A discussion over specification questions will be held on the evening of the 9th with the brick committee of the American Society of Municipal Improvements. This will be interesting to all engineers. On the latter two days a study of brick construction for country highways will be made by the members of the association, including a large number of engineers and road builders to whom invitations have been extended to take part in the program. A visit on Sept. 10 will be made to East Aurora, made famous by the inimitable Elbert Hubbard, who will deliver a talk to the visiting manufacturers and engineers at a luncheon to be served at Roycroft Inn, after which the delegates will return to Buffalo and assemble for an evening dinner at the Statler hotel. On Sept. 11 a journey will be made over the Niagara boulevard to Fort Niagara. Last year's annual meeting was a departure from the indoor paper discussion of construction methods and this idea will be carried out in the coming convention, which is expected to greatly surpass that of a year ago.

The plant of Henry Mayer, manufacturer of fire brick, Frostburg, Md., was damaged by fire recently at a loss of \$10,000.

The National Paving Brick Manufacturers' Association has started the publication of a magazine devoted to the interests of good roads, under the title of "Dependable Highways." The publication will be under the direct supervision of Secretary Will P. Blair and his energetic assistant, H. H. Macdonald. With this battery of experts some very strong and helpful articles and suggestions with reference to brick road building may be expected.



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P. O. Lind, of Chicago, has purchased the plant and properties of the Holton Brick Co. at Muskegon, Mich.

Chas. J. Haden, of Atlanta, is organizing a company for the purpose of manufacturing bricks at Rockmart, Ga.

Henry Oleson & Son, of Loop City, Neb., have bought out the David City brick yard. They will overhaul the plant and commence making brick as soon as practicable.

G. Gmeiner, a brick manufacturer of Waupaca, Wis., is preparing to take up the manufacture of a harder type of brick than is now turned out in his plant. Considerable new equipment will be installed.

The Standard Vitified Brick Co., of Coffeyville, Kas., have decided to double their capacity by the installation of additional mills and more machinery and will confine their activities hereafter to paving brick exclusively.

The Dickey Clay Manufacturing Co., of Kansas City, is conducting a silo campaign at present, admonishing agriculturists to use clay silos in preference to others. The company has reduced prices on this line and expects to move a lot of clay silos during the coming month.

L. R. Ellis, American Bank building, Seattle, Wash., has secured a contract for two miles of brick paving to be laid on the Redmond-Snoqualmie roadway in Kings county, Wash. He has placed the contract for 1,800,000 paving brick required with the Denny-Renton Clay & Coal Co., of Seattle.

At Puryear, Tenn., the Dixie Brick & Tile Co. has reorganized, increasing its capital, and is completing improvements, which include the installation of new mechanical drying and burning equipment. The additions to the equipment will bring the daily equipment to 50,000 brick daily.

J. B. Wilson, manager of the Star Clay Co., Merz-town, Pa., and Henry F. Leas, connected with the same concern, were in Allentown recently making arrangements with McDermott Bros. for the installation of a new plant at Longswamp, Berks county, where the concern has an excellent quality of white clay. The new plant will be equipped with dryers, boilers, engines and other machinery. Mr. Wilson has been connected with the plant for the past 40 years and is acquainted with every detail of the business.

At a recent meeting of the board of directors of the National Sewer Pipe Co., Webster City, Ia., it was decided that the work on the four new kilns at their plant should be started at the earliest possible opportunity, in order that they may keep up with their orders. Within the past month something like \$45,000 worth of tile has been sold by the firm and they are literally swamped with orders. Some time ago it was decided that four new kilns would have to be completed for the fall work, but the present business will force the company to hurry their building. With the four added kilns, in the neighborhood of 200 cars of tile and sewer pipe can be produced each month.

Lanius Brick Works, Lanius, Texas; postoffice at Abilene; controlled by First State Bank of Abilene; plans to rebuild shed, kilns, etc., reported burned at loss of several thousand dollars.

The plant and property of the Clay Products Co., at Wickliffe, Ky., has been sold to T. J. Neely, who has given the machinery a thorough overhauling preparatory to resuming operations at the plant, which has been idle for practically a year. The amount of consideration involved in the sale is not available. The clay found here, it is said, makes a high-grade tiling and the product has always found a ready sale.

## CANADA NOW GOOD BRICK MARKET.

The use of brick for construction work in Canada has been gradually increasing until it has reached the billion mark. An average of 1,000,000 building bricks are now consumed each year.

## NEW INCORPORATIONS.

The Streater Paving Brick Co., Streater, Mo.; changed to The Streater Brick Co.  
Brickton Brick Co., Brickton, N. C.; organized to continue plant of J. C. Sherrill.

The Abilene Press Brick Co., Abilene, Tex., has been organized with a capital of \$25,000 by E. B. Bynum and associates.

The Salisbury Brick Co., Salisbury, N. C.; capital, \$25,000; T. R. Atkinson, A. B. Atkinson, C. S. Reams and M. H. Atkinson.

The Miller Brick Co., of Columbia City, Ind., has been incorporated for the purpose of manufacturing brick and drain tile; capital stock \$10,000.

The Ridgewood Brick Works, Columbia, S. C.; capital stock, \$75,000; incorporators, B. L. Abney, of Columbia; Edward H. Titus of New York, and others.

The New Florence Fire Brick Co., of New Florence, Montgomery Co., Mo.; capital stock, \$30,000. Incorporators, S. P. Adams, Howard Ellis, and W. J. Gilbert.

The Mohawk Clay Products Co., Perrysville, Ohio; capital stock, \$25,000; incorporators, George W. Patnol, W. D. Findley, O. C. McCormick, L. B. Tomb and Paul A. Otto.

Foster & Southwick, Inc., capital stock, \$25,000; manufacture and sale of clay products, etc.; incorporators, Cora L. Foster, Bradford, Pa.; Lloyd I. Foster, Binghamton, N. Y., and Ernest L. Southwick, Binghamton, N. Y.

Beaufort Brick Co., Wilmington, N. C., has been incorporated with a capital stock of \$10,000. The officers of the new company are A. K. Tayloe, Aurora, N. C., president; W. C. Rodman, Warrington, N. C., secretary; N. C. Toler, manager.

The Fuller-Massee Co., Tampa, Fla.; capital stock, \$10,000; to handle clay products; W. R. Fuller, president, Tampa, Fla.; W. J. Massee, vice-president, and O. J. Massee, Jr., secretary-treasurer, both of Macon, Ga. The offices of the company are located in the Bruen-Webb Bldg., 406 Zack St.

International Brick Co., El Paso, Texas; capital \$200,000; Wm. Bowen, Albany, N. Y., president; Thos. R. Preese, Chicago, vice-president; Wm. Dotson, Indianapolis, Ind., secretary; purchased 220 acres clay land; proposes constructing plant with daily capacity 300 tons faced brick, roofing tile, hollow tile, sewer pipe, etc.; brick and steel buildings.

## Atlanta to House American Road Congress.

Atlanta has captured the big road meeting for 1914 of the Fourth American Road Congress, and already 47 organizations have signed the official call for the congress to be held during the week of November 5. The parent organizations are the American Highway Association and the American Automobile Association. Co-operating prominently through the holding of special sessions, the American Bar Association, the American Bankers' Association, and the National Civil Service Reform League will cast the weight of their powerful prestige in behalf of the congress. Hundreds of county boards will be represented by their chairman or county engineer to profit by the illuminating discussions of the most eminent road builders of America; to study the remarkably instructive government exhibit, which includes designs of every known type of road; and to critically compare the machinery, materials and engineering instrument exhibits from hundreds of manufacturers. So closely are city street and county road problems now related that an exceptionally large number of cities will this year send street superintendents and city engineers, or even the mayors, to gain useful information at the congress.

### STORAGE BIN WITH VALUABLE FEATURES.

The "Weller" unit-system storage bin has been placed upon the market as a valuable device in connection with the handling of sand, gravel, stone and bulk cement.

The new bin is full of valuable features. First

and foremost, the unit system allows the use of as many or as few as are required. They can be easily taken apart and as quickly put together again. This feature saves a good deal of work necessary where old style bins are constructed. These bins can be hauled from yards to jobs and erected in a few hours' time, therefore practical economy is bound to make them popular.

According to the manufacturers, material can be unloaded, handled and delivered to the concrete mixer at ten cents per cubic yard. Their catalogue, No. P-25, gives the above mentioned features in detail. It is practically illustrated and will interest men engaged in the handling and use of sand, gravel, stone, cement, etc. The bins are manufactured by the Weller Manufacturing Co., of Chicago.

Joseph T. Ryerson & Son, Chicago, Ill., has just issued Technical Library No. 8 on Concrete Reinforcing. The Ryerson company has branch offices located throughout the entire country and is an extensive dealer in iron, steel and machinery. In the pamphlet just published reinforcing bars, expanded metal, and corrugated sheet steel centering are illustrated and data given as to their uses in concrete reinforcing.

The Link-Belt Co. recently issued Section "A" of Catalogue No. 110, dealing with the Original Ewart Detachable Link-Belt and Sprocket Wheels. The 111 pages of the catalog give a well-illustrated account of the standard and special sizes of the Ewart Link-Belt and much detailed account of the company's chains, sprocket wheels and other products.

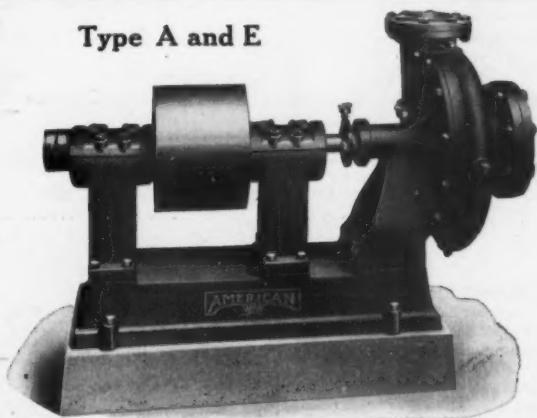
## American Road Builders' Association to Meet in Chicago.

Great interest is being manifested everywhere in the coming annual meeting of the American Road Builders' Association, which will be known as the Fifth American Good Roads Congress and Sixth Good Roads Show, to be held at the International Amphitheatre, Chicago, Ill., December 14-17, 1914.

The programme, it is understood, is being arranged with especial reference to making it of the greatest interest and the utmost practical value to men actually engaged in road and paving construction as officials, engineers or contractors. The members of the Program committee, which is now engaged in the preparation of the program, are as follows: W. A. McLean, chairman, chief engineer of highways and commissioner of the Ontario public roads and highways commission, Toronto, Ont., Canada; Geo. W. Tillson, consulting engineer to the president of the borough of Brooklyn, New York, N. Y.; R. A. Meeker, state highway engineer of New Jersey, Trenton, N. J.; E. L. Powers, editor of Good Roads, New York, N. Y.; Major W. W. Crosby, chief engineer of the Maryland geological survey, Baltimore, Md.; William H. Connell, chief of the bureau of highways and street cleaning, Philadelphia, Pa.; C. A. Kenyon, member of the Indiana advisory commission, Indianapolis, Ind., and A. N. Johnson, bureau of municipal research, New York, N. Y.

The Stephens-Adamson Mfg. Co. has just issued a new catalog concerning the "S-A" Elevating and Conveying Machinery. The catalog gives a graphic and very readable account of the many uses of their products.

Type A and E



## THE ASSURANCE OF A PERFECT PUMP

WE HAVE MADE PUMPS FOR OVER FORTY YEARS

During this time we have built nearly every type of pump that has been extensively used. Our centrifugals are not the product of one mind, but represent the best thought of a corps of pump designers, constantly striving to produce a better centrifugal pump than has been made.

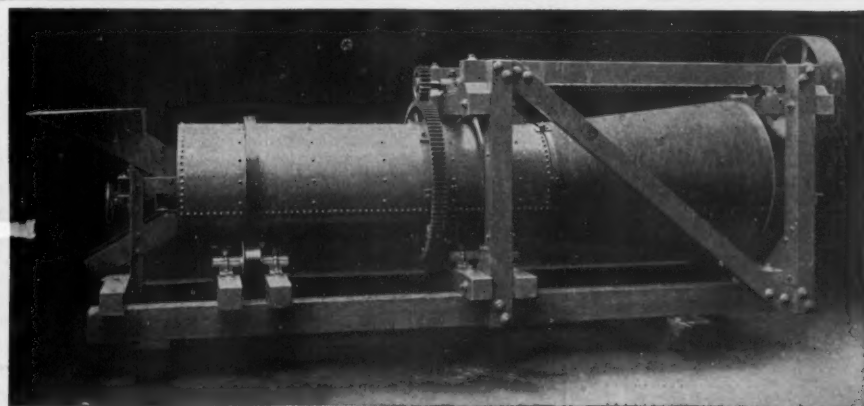
One of the principal reasons for the success of the "American" centrifugal pump is, that we do not recommend any single pump for all conditions, but for every location we have a pump especially adapted for just such a requirement.

Quarry Pumps of All Types and Sizes

### THE AMERICAN WELL WORKS,

General Offices and Works, Aurora, Ill.

Chicago Office, First National Bank Building



## Dull's Portable Gravel Washer

Has answered the demand of progressive producers for obtaining clean sand and gravel. The Dull Washer is simple and efficient in operation, substantially built and easy to handle.

WRITE FOR BULLETIN

### THE RAYMOND W. DULL COMPANY

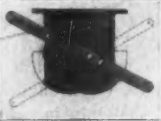
1910 Conway Building

CHICAGO, ILL.

Tell 'em you saw it in ROCK PRODUCTS AND BUILDING MATERIALS



**SERVICE AND SALES BUREAU**  
First Aid to the  
**ADVERTISERS and SUBSCRIBERS**  
Let Us Tell You More About It



**WELLER-MADE**

**DELIVERY GATES**  
Undercut Overcut Duplex  
Plain or Special

**SCREENS :: ELEVATORS**  
Everything for handling Sand, Gravel and Crushed Stone

**Weller Mfg. Co., Chicago**





**IT WILL PAY YOU TO HANDLE THE MODERN FIRE PROOF BUILDING MATERIAL**

We manufacture all sizes and shapes from the highest grade shale by the most modern process, including backing up, partition, floor arches and hollow brick; also DRAIN TILE.

**AMERICAN CLAY CO.**  
25 So. Seventh St., TERRE HAUTE, IND.

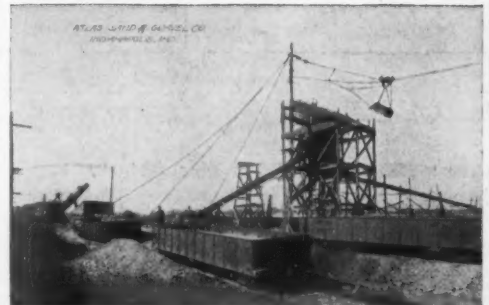


**Shearer & Mayer DRAGLINE CABLEWAY EXCAVATOR**  
(Patented)

A rapid, simple, efficient, economical machine for excavating sand and gravel and delivering it to bins, screens, cars or storage piles. It digs, conveys, elevates and dumps in one continuous forward operation. It can be dumped fast or slow, as the operation is under **POSITIVE CONTROL** of one operator.

It is a substantially constructed piece of equipment and all wearing parts are thoroughly reinforced to meet the severe service of gravel excavation.

The illustration at the left shows the loaded bucket emerging from the pit and at the right it shows the same bucket delivering to screens. Let us tell you more about this system.



**Sauerman Brothers** 1140 Monadnock Block, CHICAGO, ILL.  
DRAGLINE CABLEWAY ENGINEERS AND SELLING AGENTS

**ROCK PRODUCTS AND BUILDING MATERIALS**

**Index to Advertisements**

SEPTEMBER 7, 1914

Allegheny Steel Band Co. .... 8	Chicago Portland Cement Co. .... 4	Hocking Valley Fire Clay Co. .... 41	Metropolitan Paving Brick Co. .... 37	Security Cement & Lime Co. ....
Allen Amer. Manganese Steel Co., Edgar .....	Classified Business Directory.. 39	Houston Bros. Co. .... 7	Miscampbell, H. ....	Smidth, F. L., & Co. ....
Atlas-Chalmers Mfg. Co. ....	Clayton Air Compressor Works 9	Howells Mining Drill Co. ....	Mitchell Lime Co. ....	Shaw, Willis, Mch. Co. ....
Alton Brick Co. .... 7	Columbus Chain Co., The. ....	Hunt, Robert W., & Co. .... 7	Moore's Lime Co., The. ....	Stephens-Adamson Mfg. Co. .... 21
American Cement Plaster Co. .... 40	Consolidated Tramway Co. .... 21			St. Louis Port. Cement Co. .... 44
American Clay Machine Co. ....	Copley Cement Mfg. Co. ....	Imperial Belting Co. ....	National Engineering Co. ....	Sturtevant Mill Co. ....
American Clay Co. .... 38	Crane, P. D., Co. .... 22	Improved Equipment Co. .... 10	National Lime & Stone Co. .... 4	Sykes Metal Lath & Roofing Co. 8
American Keene Cement Co. ....	Crossley, Geo. C. .... 24	Indianapolis Cable Excavator Co. .... 22	National Mortar & Sup. Co. .... 5	
American Process Co. ....	Curry, J. P., Mfg. Co. ....		National Paving Brick Mfrs. Assn. .... 7	Taylor-Wharton Iron & Steel Co. ....
American Pulverizer Co. ....	Cyclone Drill Co., The. ....	Jackson & Church Co. ....	National Plaster Board Co. ....	The Automatic Shovel Co., The. ....
American Steel & Wire Co. ....		Jaeger Machine Co. ....	National Retarder Co. ....	Thompson-Armstrong Co. .... 6
American Well Works. .... 37	Davenport Loco. Works. ....	Jaite Co., The. .... 24	Northwestern Expanded Metal Co. .... 43	Thornton Fire Brick Co. .... 7
Atlas Car & Mfg. Co. ....	Dexter Portland Cement Co. .... 2	Jeffrey Mfg. Co. ....	North Western States Portland Cement Co. .... 4	Traylor Eng. & Mfg. Co. .... 9
Atlas Portland Cement Co. ....	Diamond Labor Agency. .... 24	Johnston & Chapman Co. ....		Troy Wagon Works Co., The. ....
Austin Mfg. Co. ....	Duff Patents Co. ....		Ohio & Western Lime Co. .... 5	Union Mining Co. ....
Automatic Weighing Machine Co. ....	Dull & Co., Raymond W. .... 37	Kansas City Pt. Ct. Wks. ....	Owen Bucket Co., The. ....	Union Sand & Material Co. ....
	Dunning, W. D. ....	Kelley Island Lime & Trans. Co. .... 10	Owen & Son, J. D. .... 43	U. S. Gypsum Co. .... 44
Bacon, C. Earle. ....	Ehram, J. B., & Sons Mfg. Co. ....	Kelly Plaster Co. .... 6		Universal Portland Cement Co. ....
Bartlett, The C. O., & Snow Co. ....	Evans Clay Mfg. Co. .... 22	Kent Mill Co. ....	Penn Metal Co. .... 36	Urschel Bates Valve Bag Co. .... 43
Belden Bros. Co. .... 42	Faerberhill Mfg. Co. .... 2	Kewanee Mfg. Co. .... 9	Pennsylvania Crusher Co. .... 2	
Best Bros. Keene's Cement Co. .... 4	Farrell Fdy. & Mch. Co. ....	Kissel Motor Car Co. .... 40	Phoenix Portland Cement Co. ....	Vulcanite Portland Cement Co. ....
Bonnot Co., The. ....	Foster Co., L. B. .... 24	Kritzer Company, The. .... 5	Plymouth Clay Products Co. .... 22	
Books for the Trade. .... 23	French, Samuel H., & Co. .... 2		Plymouth Gypsum Co., The. .... 6	Webster Mfg. Co. ....
Bostwick Steel Lath Co. .... 9	Fuller Eng. Co. ....	Lehigh Portland Cement Co. .... 10	Power & Mining Mach. Co. ....	Weller Mfg. Co. .... 38
Bourse, The. .... 24		Lewistown Fdy. & Mch. Co. ....		West Jersey Bag Co. ....
Bradley Pulv. Co. ....	Gallon Iron Works & Mfg. Co. .... 42	Link Belt Co. ....	Raymond Bros. Impact. Pulv. Co., The. ....	Wheeling Wall Plaster Co. .... 2
Buckbee Co., J. C. .... 22	Giant Portland Cement Co. ....	Loomis Machine Co., The. ....	Reynolds Asphalt Shingle Co. .... 42	Whitacre Fireproofing Co. .... 2
Butterworth & Lowe. ....	Goodrich Co., The B. F. ....	McLanahan Stone Mch. Co. ....	Ricketson Mineral P. Wks. ....	Whitehall Cement Mfg. Co. ....
	Grimsley, G. P. ....	McMyler Interstate Co. .... 2	Ruggles-Coles Eng. Co. ....	Williams, C. K., Co. ....
Cabot, Samuel, Inc. ....		MacNeal, Jas. B., & Co. ....		Williams Patent Crusher & Pulverizer Co. ....
Caldwell, H. W., & Son Co. ....	Hannibal Lime Co. .... 22	Marquette Cement Mfg. Co. .... 4	Sandusky Portland Cem. Co. .... 3	Wolverine Portland Cement Co. ....
Canada Pebble Co., Ltd. ....	Harris Brick Co. .... 7	Martin, Henry, Brick Mch. Mfg. Co. ....	Sauerman Bros. .... 38	Woodville Lime & Cement Co. .... 1
Cardiff Gypsum Plaster Co. .... 6	Hendricks Mfg. Co. ....	Maumee Chemical Co. ....	Schaffer Engineering & Equipment Co., The. ....	Worrell, S. E. ....
Carolina Portland Cement Co. ....	Heppes Co., The. .... 41	Meade, Richard K. ....	Scoto Lime & Stone Co. ....	
Ceresit Waterproofing Co. .... 23	Hercules Waterproof Cement Co. ....			
Chattanooga Paint Co. ....				
Chicago Belting Co. ....				

Tell 'em you saw it in ROCK PRODUCTS AND BUILDING MATERIALS

# CLASSIFIED BUSINESS DIRECTORY

## BAGS AND BAG TYERS.

Curry Mfg. Co., J. P. (bag tyers).  
Faeberhill Mfg. Co. (bag tyers).  
Jalte Company, The.  
Urschel States Valve Bag Co.  
West Jersey Bag Co., The.

## BELTING.

H. W. Caldwell & Co.  
Chicago Belting Co.  
Dull & Co., R. W.  
B. F. Goodrich & Co.  
Imperial Belting Co.  
Stephens-Adams Mfg. Co.  
Webster Mfg. Company.  
Weller Mfg. Co.

## BRICK.

Belden Brick Co.  
Hocking Valley Clay Co.  
Metropolitan Paving Brick Co.

## BRICK CLAMPS.

The P. D. Crane Co.

## BRICK PAVING.

Alton Brick Co.  
Harris Brick Co.  
Metropolitan Paving Brick Co.  
National Paving Brick Mfrs. Assoc.  
Thornton Fire Brick Co.

## BUCKETS, DUMPING AND GRAB.

Atlas Car & Mfg. Co.  
H. W. Caldwell & Co.  
Hendrick Mfg. Co.  
McMyler-Interstate Co.  
Owen Bucket Co.  
Willis Shaw Mch. Co.

## CABLES.

American Steel & Wire Co.  
Dull & Co., R. W.  
Sauerman Bros.

## CASTINGS.

Allis-Chalmers Mfg. Co.  
Edgar Allen Amer. Mang. Steel Co.  
Taylor-Wharton Iron & Steel Co.

## CEMENT, HYDRAULIC.

Carolina Portland Cement Co.

## CEMENT, PORTLAND.

Atlas Portland Cement Co.  
Carolina Portland Cement Co.  
Chicago Portland Cement Co.  
Coplay Cement Mfg. Co.  
Dexter Portland Cement Co.  
French, Samuel H. & Co.  
Giant Port. Cement Co.  
Kansas City Portland Cement Co.  
Lehigh Portland Cement Co.  
Marquette Cement Mfg. Co.  
Northwestern States Portland Cement Co.  
Ohio & Western Lime Co.  
Phoenix Portland Cement Co.  
Sandusky Portland Cement Co.  
St. Louis Portland Cement Works.  
Security Cement & Lime Co.  
Union Sand & Material Co.  
Universal Portland Cement Co.  
Vulcanite Portland Cement Co.  
Whitehall Portland Cement Mfg. Co.  
Wolverine Portland Cement Co.  
Woodville Lime & Cement Co., The.

## CHAINS.

Edgar Allen Amer. Mang. Steel Co.  
Columbus Chain Co., The.  
Jeffrey Mfg. Co.  
Taylor-Wharton Iron & Steel Co.

## CLAY AND FIRE CLAY.

Crossley, Geo. C.

## CLAYWORKING MCHY.

American Clay Mch. Co.  
Bartlett, C. O., & Snow Co.

## COAL CHUTES.

Kewanee Mfg. Co.

## COLORINGS, DRY AND MORTAR.

Samuel Cabot.  
Chattanooga Paint Co.  
Clinton Metallic Paint Co.  
Macneal, James R., & Co.  
Ricketson Mineral Paint Works.  
Williams, C. K., & Co.

## COMPRESSORS.

Allis-Chalmers Mfg. Co.  
Clayton Air Compressor Co.

## CONCRETE MIXERS.

Jaeger Mach. Co.  
Macampbell, H.  
Power & Mining Mach. Co.

## CONCRETE REINFORCEMENT.

American Steel & Wire Co.

## CONVEYORS AND ELEVATORS.

Allis-Chalmers Manufacturing Co.  
Austin Mfg. Co.  
Bartlett, C. O., & Snow Co.  
Caldwell, H. W., & Sons Co.  
Dull, Raymond W., & Co.  
Ehrsam, J. R., & Sons Mfg. Co.  
Goodrich Co., The B. F.  
Jeffrey Manufacturing Co.  
Link Belt Co.  
McMyler-Interstate Co.  
McLanahan Stone Machine Co.  
Power & Mining Mach. Co.  
Stephens-Adams Mfg. Co.  
Webster Mfg. Company.  
Weller Mfg. Co.

## CONSULTING GEOLOGISTS.

Grimsley, G. P., Ph. D.  
Robt. W. Hunt & Co.

## CORNER BEADS.

Bostwick Steel Lath Co., The.  
Penn Metal Co.

## CRANES—LOCOMOTIVE AND GANTRY.

Link Belt Co.  
McMyler-Interstate Co.

## CRUSHERS AND PULVERIZERS.

Allis-Chalmers Manufacturing Co.  
American Pulverizer Co.  
Austin Mfg. Co.  
Bacon, Earl C.  
Bartlett, C. O., & Snow Co.  
Bonnot Co., The.  
Bradley Pulverizer Co.  
Butterworth & Lowe.  
Ehrsam, J. R., & Sons Mfg. Co.  
Jeffrey Manufacturing Co.  
Kent Mill Co.  
Lewistown Foundry & Machine Co.  
Martin, Henry.  
McLanahan Stone Machine Co.  
Pennsylvania Crusher Co.  
Power & Mining Mach. Co.  
Raymond Impact Pulverizer Co.  
Sturtevant Mill Co.  
Taylor-Wharton Iron & Steel Co.  
Traylor Eng. & Mfg. Co.  
Williams Pat. Crusher & Pulverizer Co.

## DRAIN TILE.

American Brick & Tile Co.  
American Clay Co.  
Evans Clay Mfg. Co.  
Mason City Brick & Tile Co.

## DRILLS.

Cyclone Quarry Drill Co.  
Howells Mining Drill Co.  
Loomis Machine Co.

## DRYERS.

American Process Co.  
Bartlett, C. O., & Snow Co.  
Ruggles-Coles Eng. Co.  
Worrell, S. E.

## DUMP CARS.

Atlas Car & Mfg. Co.  
Austin Mfg. Co.  
Stephens-Adams Mfg. Co.  
Weller Mfg. Co.

## ENGINEERS.

Racon, Earl C.  
Buckbee Co., J. C.  
Duff Patents Co., Inc.  
Dull, Raymond W., & Co.  
Fuller Engineering Co.  
Grimsley, G. P.  
Robt. W. Hunt & Co.  
Improved Equipment Co.  
Kirkpatrick, W. C.  
Meade, R. K.  
Nat'l Engineering Co.  
Sauerman Bros.  
Schaffer Eng. & Equip. Co.  
Smith & Co., F. L.  
Stephens-Adams Mfg. Co.

## ENGINES.

Allis-Chalmers Mfg. Co.  
Jackson & Church Co.  
Power & Mining Mach. Co.

## EXCAVATORS.

Buckbee Co., J. C.  
Raymond W. Dull Co.  
Indianapolis Cable Excavator Co.  
McMyler-Interstate Co.  
Jackson & Church Co.  
Owen Bucket Co.  
Sauerman Bros.  
Weller Mfg. Co.

## FIRE BRICK.

Carolina Portland Cement Co.  
Evans Clay Mfg. Co.  
Improved Equipment Co.  
Mason City Brick & Tile Co.  
Thornton Fire Brick Co.  
Thompson-Armstrong Co.  
Union Mining Co.

## FLUE LININGS.

Evans Clay Mfg. Co.  
Thompson-Armstrong Co.

## FURNACES FOR SPECIAL PURPOSES.

Improved Equipment Co.

## GEARS.

Edgar Allen Amer. Mang. Steel Co.  
Caldwell, H. W., & Sons Co.  
Stephens-Adams Mfg. Co.  
Taylor-Wharton Iron & Steel Co.  
Weller Mfg. Co.

## GLASS SAND MACHINERY.

Lewiston Fdy. & Mach. Co.

## GYPSUM—PLASTER.

American Cement Plaster Co.  
American Keene Cement Co.  
Best Iron Keene's Cement Co.  
Cardiff Gypsum Co.  
Carolina Portland Cement Co.  
Kelly Plaster Co.  
National Mortar & Supply Co.  
Ohio & Western Lime Co.  
Plymouth Gypsum Co.  
U. S. Gypsum Co.  
Wheeling Wall Plaster Co.

## HAIR.

Ohio & Western Lime Co.

## HOISTS, ELECTRIC AND STEAM.

Allis-Chalmers Mfg. Co.  
Buckbee Co., J. C.

## HOLLOW CLAY TILE.

American Clay Co.  
Mason City Brick & Tile Co.  
Metropolitan Paving Brick Co.  
Whitacre Fireproofing Co.

## HYDRATING MCHY.

Kritzer, Co., The.  
H. Macampbell.

## LIME.

Carolina P. C. Co.  
Hannibal Lime Co.  
Kelly Island Lime & Trans. Co.  
Mitchell Lime Co.  
The Moores Lime Co.  
National Lime & Stone Co.  
National Mortar & Supply Co.  
Ningara Gypsum Co.  
Ohio & Western Lime Co., The.  
Owens & Son, John D.  
Scioto Lime & Stone Co.  
Security Cement & Lime Co.  
Woodville Lime & Cement Co.

## LIME, HYDRATED.

Hannibal Lime Co.  
Kelly Island Lime & Transport Co.  
Mitchell Lime Co.  
The Moores Lime Co.  
National Lime & Stone Co.  
National Mortar & Supply Co.  
Ningara Gypsum Co.  
Ohio & Western Lime Co., The.  
Owens & Son, John D.  
Scioto Lime & Stone Co.  
Security Cement & Lime Co.  
Woodville Lime & Cement Co., The.

## LIME KILNS.

Improved Equipment Co.

## LOADERS.

Gallon Iron Works & Mfg. Co., The.  
Jeffrey Mfg. Co.  
Link Belt Co.  
Stephens-Adams Mfg. Co.  
Weller Mfg. Co.

## LOCOMOTIVES.

Davenport Locomotive Wks.  
Willis Shaw Mch. Co.

## MANGANESE STEEL.

Allis-Chalmers Mfg. Co.  
Edgar Allen American Manganese Steel Co.  
Taylor-Wharton Iron & Steel Co.

## METAL LATH.

Bostwick Steel Lath Co.  
Carolina Portland Cement Co.  
North Western Expanded Metal Co.  
Sykes Metal Lath & Roofing Co.

## MOTOR TRUCKS.

Kissel Motor Car Co.

## PAINT AND COATINGS.

Samuel Cabot.  
Chattanooga Paint Co.  
James R. Macneal & Co.  
Ricketson Mineral Paint Co.  
C. K. Williams & Co.

## PEBBLES.

Canada Pebble Co.

## PERFORATED METALS.

Allis-Chalmers Mfg. Co.  
Johnson & Chapman.  
Hendrick Mfg. Co.

## PREPARED ROOFING—SHINGLES.

Carolina Portland Cement Co.  
The Heppes Co.  
Reynolds Asphalt Shingle Co.

## PLASTER.

See Gypsum.

## PLASTER BOARD.

National Plaster Board Co.  
Niagara Gypsum Co.  
Plymouth Gypsum Co.  
U. S. Gypsum Co.

## PLASTER MCHY.

Butterworth & Lowe.  
Dunning, W. D.  
Ehrsam, J. R., & Sons Mfg. Co.  
Macampbell, H.  
Williams Pat. Crusher & Pulverizer Co.

## PUMPS.

Allis-Chalmers Mfg. Co.  
Amer. Well Wks.

## ROAD MACHINERY.

Austin Mfg. Co.  
Troy Wagon Works.

## ROOFING-METAL.

Sykes Metal Lath & Roofing Co.

## SEWER PIPE.

Evans Clay Mfg. Co.  
Houston Bros. Co.  
Plymouth Clay Products Co.  
Thompson-Armstrong Co.

## SILO BLOCKS.

American Brick & Tile Co.  
Mason City Brick & Tile Co.

## QUARRY CARS.

See Dump Cars.

## SAND.

Crossley, Geo. C.  
Union Sand & Material Co.

## SAND AND GRAVEL WASHING PLANTS.

Dull & Co., Raymond W.  
Stephens-Adams Mfg. Co.  
Webster Mfg. Co.  
Weller Mfg. Co.

## SAND LIME BRICK MACHINERY.

Amer. Clay Mach. Co.  
Jackson & Church.

## SCREENS.

Allis-Chalmers Mfg. Co.  
American Pulverizer Co.  
Butterworth & Lowe.  
Dull & Co., Raymond W.  
Edgar Allen Amer. Mang. Steel Co.  
Ehrsam, J. R., & Sons Mfg. Co.  
Hendricks Mfg. Co.  
Johnson & Chapman Co.  
McLanahan Stone Machine Co.  
National Eng. Co.  
Power & Mining Mach. Co.  
Stephens-Adams Mfg. Co.  
Sturtevant Mill Co.  
Webster Mfg. Company.  
Weller Mfg. Co.

## STEAM SHOVELS.

Marion-Osgood Co., The.  
Thew Automatic Shovel Co.  
Willis Shaw Mch. Co.

## SINK AND FLOAT TESTERS.

Pennsylvania Crusher Co.

## STEAM SHOVEL TEETH.

Edgar Allen Am. Manganese Steel Co.  
Taylor-Wharton Iron & Steel Co.

## STUCCO RETARDER.

National Retarder Co.

## TIRES—RUBBER.

B. F. Goodrich Co.

## TRAMWAYS.

Consolidated Tramway Co.

## TUBE MILLS.

Allis-Chalmers Manufacturing Co.  
Jackson & Church Co.  
Power & Mining Mach. Co.  
Smith & Co., F. L.

## WAGONS.

Troy Wagon Wks. Co., The.

## WALL PLUGS AND TIES.

Allegheny Steel Band Co.  
Sykes Metal Lath & Roofing Co.

## WATERPROOFING.

Cabot, Samuel, Inc.  
Carolina Portland Cement Co.  
Crescent Waterproofing Co.  
Hercules Waterproofing Cement Co.  
Maumee Chemical Co.  
Sandusky Portland Cement Co.

## WEIGHING MACHINES.

Automatic Weighing Machine Co.  
Schaffer Eng. & Equip. Co.  
Sturtevant Mill Co.

## WIRE AND WIRE FENCING.

American Steel & Wire Co.

## WIRE ROPE.

American Steel & Wire Co.  
Buckbee Co., J. C.

Tell 'em you saw it in ROCK PRODUCTS AND BUILDING MATERIALS



# For Hard Service KisselKar Trucks Are Preferred

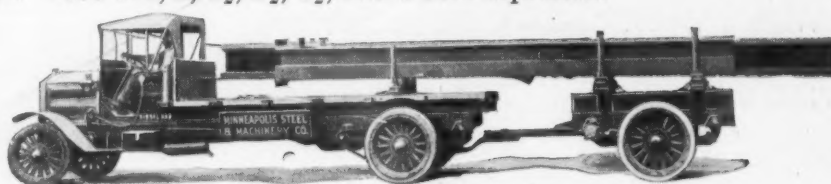
The Minneapolis Steel and Machinery Company needed a big, sturdy, *reliable* truck, and after trying out a number of makes, decided that the KisselKar Truck could best do the required work. They were won not only by a satisfactory demonstration, but by the uniformly good report from owners of other KisselKar Trucks.

## KISSELKAR TRUCKS

KisselKar Trucks are built to fit the particular service expected of them. Individual conditions are studied, and the size, capacity, body construction and other details made accordingly.

There are six sizes of KisselKar Trucks—1500 lbs., 1, 1½, 2½, 3½, and 6 tons capacities.

KisselKar Trucks are used in more than 200 lines of business. Send for illustrated portfolio showing 350 of them in action—it's convincing.



Six ton KisselKar truck in the service of the Minneapolis Steel & Machinery Co.

**Kissel Motor Car Company, 548 Kissel Avenue  
HARTFORD, WIS.**

New York

Chicago

Philadelphia

Boston

St. Louis

Milwaukee

Minneapolis

St. Paul

San Francisco

Kansas City

Los Angeles

Dallas and 300 other leading American and Canadian points.

# AMERICAN CEMENT PLASTER COMPANY

General Offices: Lawrence, Kansas.

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Branch Offices: Columbus, Ohio. Ft. Dodge, Iowa.

MANUFACTURERS OF

**Wall Plaster, Wood Fiber Plaster  
Molding and Dental Plaster  
Finish Plaster  
Wall Board and  
Gypsum Partition Tile**

**AGENTS FOR BEST BROS. KEENE'S CEMENT**

Tell 'em you saw it in ROCK PRODUCTS AND BUILDING MATERIALS

## DEALERS PROFIT SHARING LINE



ALEXANDER MCCLURE SCHOOL, Philadelphia, Pa. Manufactured with SALT GLAZED BRICK, Shade 109  
J. H. Cook, Architect, Philadelphia, Pa. Manufactured by The H. V. F. C. Co., Nelsonville, Ohio

### Salt Glazed Brick vs. Other Facing Materials.

By using **Salt Glazed Brick** instead of enamel brick, 50% of the cost is saved, a better wall is obtained and one that will not peel off or chip at the slightest rap as does enamel brick. Easier to clean, looks nicer, more permanent.

**Salt Glazed Brick** is known to be the best facing material on the market, besides being the least expensive for a handsome looking wall.



"Athena" Salt Glazed Brick

We have the best clay for salt glazing.  
We employ the best equipment in manufacturing.  
We use greater skill in preparation of the clay, drying and burning.  
We understand thoroughly the art of salt glazing.  
We are progressive and follow progressive methods.

*DEALERS—Write Us For Our  
Special Proposition, Also For Our  
Large Illustrated Catalog.*

**The Hocking Valley Fire Clay Co.**  
NELSONVILLE, OHIO

## Announcing

*Our New Facilities for Manufacturing*

## UTILITY

the only 5-ply wall board

We are now making **Utility Wall Board** in our new plant under greatly improved manufacturing conditions. All wood construction has been replaced with reinforced concrete and much room added.

We are now able to take care of far more business than ever before.

By cutting production costs to a minimum, our increased mechanical facilities insure a wall board of even better quality than 5-ply **Utility** has been.

We extend a cordial invitation to you to visit this new **Utility Wall Board** plant whenever convenient.

## THE HEPPE'S CO.

Manufacturers also of Flex-a-Tile Asphalt Shingles,  
Asphalt Paint and Asphalt Roofing in Any Finish.

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Chicago, Ill.

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**Beautiful Houses from Illinois to  
Massachusetts are Roofed  
with Reynolds Flexible  
Asphalt Shingles**

A multitude of pretentious residences in a score of states are giving ample proof of the long-lasting surface of Reynolds Flexible Asphalt Shingles.

Every type of modern home can be protected and beautified, at lower cost, with these time-

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**Reynolds Asphalt Shingles**

Guaranteed for 10 years—will wear many years longer—  
Write for liberal agency proposition.

Rough-surfaced weather defiers made of crushed slate or granite securely embedded in pure Asphalt. Natural colors of garnet, red or gray-green which never fade and never need painting. We are the original makers of flexible asphalt slate shingles and tested them for ten years before putting them on the market. They are uniform in size—8 ins. by 12½ ins.—and are laid 4 ins. to the weather. Easily and quickly laid.

Let us send you a booklet showing photographs of modern houses roofed with Reynolds Asphalt Shingles. Write for a copy TODAY

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Original Manufacturer Grand Rapids, Mich.  
Established 1868 Members of National Builders' Supply Association

**YOU CAN UNLOAD YOUR CRUSHED  
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**THE GALION ECLIPSE  
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does this by unloading crushed stone, gravel, sand, coal, etc., at the rate of forty tons per hour. Hauling wagons and motor trucks are loaded in one minute instead of thirty, by one man instead of six. No delay, no waiting. Your equipment and drivers are kept busy all the time. You cannot afford to overlook this proposition. The sooner you investigate, the sooner your profits will increase.



Write today for catalog and complete information.

**The Galion Iron Works & Mfg. Co.**

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ROAD MAKING MACHINERY

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**THE BELDEN BRICK CO.**

Incorporated 1893

**Sales Offices:**

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**FIVE MODERN FACTORIES**

producing practically every color and texture of Face Brick put us in position to take care of the dealer to the best possible advantage. It will pay you to have our samples and prices. Write now.

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# **Kno-Burn**

## **EXPANDED METAL LATH**

**Is Sold  
Through  
Dealers  
ONLY**

**North Western Expanded Metal Co.**  
929 OLD COLONY BUILDING, CHICAGO, U. S. A.

There are two things that we want you to bear in mind, Mr. Building Supply Dealer, as you read this advertisement.

First: You are **protected** by our policy of selling through dealers exclusively when you handle Kno-Burn Expanded Metal Lath.

Second: Our national advertising makes "Kno-Burn" easy to sell because contractors and architects are recommending it and the owner asks for it.

Couple these two advantages to the fact that there is no better Metal Lath made and that our prices are always in line and we know you will write us for details. Ask for Booklet 293.

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The Largest Lime Plant Individually Owned  
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**Marion Lump Lime in Bulk  
Marion Lump Lime in Barrels**

**Mason's Hydrate Clover Leaf Brand  
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**Agricultural Lime All Kinds**

WRITE TO-DAY  
QUICK SERVICE

**John D. Owens & Son**  
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**I**f you knew  
positively that  
you could free yourself  
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all delays and waste of money,  
you certainly would take steps  
toward that end. The Bates  
System Valve Bagger with valve  
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the work you want automatically and  
accurately fill and weigh every sack.  
150 tons per day of lime—one machine.

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Constructing "SACKETT Built Walls"  
SACKETT Plaster Board and U. S. G. Wall Plaster

**AIM RIGHT.** Hit the bull's eye by selling SACKETT Plaster Board instead of wood lath. SACKETT is one of the most profitable materials a supply merchant can handle.

**1st.** SACKETT is easy to sell—and at a profit from two to three times greater than wood lath.

**2nd.** It gives satisfaction—better interior [wall construction for the builder.

**3rd.** There is no loss—the stock does not deteriorate or get out of date—it always represents a live profitable asset.

**4th.** SACKETT adds to the volume of business without a corresponding increase in expense. It goes hand in hand with U. S. G. Wall Plaster—on the same job—sold at the same time.

**5th.** The big SACKETT advantages draw the interest of prospective builders from the highways and byways. A prospect for SACKETT is also a prospect for other materials you handle—it's a splendid feeder for new business.

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## United States Gypsum Company

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**Red Ring Portland Cement**

*Quantity*  
*Service*  
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*Above Standard*  
*Specification*  
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**Thru The Dealers**

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OFFICE:

**St. Louis Portland Cement Works**

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